

Technical Specification Group Radio Access Network
 Marco Island, USA 4 - 7 June 2002

RP#16(02) 0412

TSG_Doc_Num	Specification	CR_Num	Revision_Num	3G_Release	CR_Subject	CR_Category	Cur_Ver_Num	New_Ver_Num	Tdoc_Num	WorkItem
RP-020412	25.433	630	2	R99	Criticality Information Decoding Failure Handling	F	3.9.0	3.10.0	R3-021175	TEI
RP-020412	25.433	631	2	Rel-4	Criticality Information Decoding Failure Handling	A	4.4.0	4.5.0	R3-021174	TEI
RP-020412	25.433	633		Rel-5	Criticality Information Decoding Failure Handling	A	5.0.0	5.1.0	R3-021173	TEI
RP-020412	25.433	634	1	R99	Alignment of tabular and ASN.1 coding for DL power	F	3.9.0	3.10.0	R3-021558	TEI
RP-020412	25.433	635	1	Rel-4	Alignment of tabular and ASN.1 coding for DL power	A	4.4.0	4.5.0	R3-021559	TEI
RP-020412	25.433	636	1	Rel-5	Alignment of tabular and ASN.1 coding for DL power	A	5.0.0	5.1.0	R3-021560	TEI
RP-020412	25.433	637	1	R99	Correction to RL Restore Indication	F	3.9.0	3.10.0	R3-021564	TEI
RP-020412	25.433	638	1	Rel-4	Correction to RL Restore Indication	A	4.4.0	4.5.0	R3-021565	TEI
RP-020412	25.433	639	1	Rel-5	Correction to RL Restore Indication	A	5.0.0	5.1.0	R3-021566	TEI
RP-020412	25.433	646		R99	Use of PDSCH RL ID for TDD DSCH/USCH	F	3.9.0	3.10.0	R3-021236	TEI
RP-020412	25.433	647		Rel-4	Use of PDSCH RL ID for TDD DSCH/USCH	A	4.4.0	4.5.0	R3-021237	TEI
RP-020412	25.433	648		Rel-5	Use of PDSCH RL ID for TDD DSCH/USCH	A	5.0.0	5.1.0	R3-021238	TEI
RP-020412	25.433	660		R99	Correction to the use of the CFN IE / SFN IE in the Measurement	F	3.9.0	3.10.0	R3-021267	TEI
RP-020412	25.433	661		Rel-4	Correction to the use of the CFN IE / SFN IE in the Measurement	A	4.4.0	4.5.0	R3-021268	TEI
RP-020412	25.433	662		Rel-5	Correction to the use of the CFN IE / SFN IE in the Measurement	A	5.0.0	5.1.0	R3-021269	TEI

RP-020412	25.433	663		R99	TFCI 0 definition for TDD	F	3.9.0	3.10.0	R3-021284	TEI
RP-020412	25.433	664		Rel-4	TFCI 0 definition for TDD	A	4.4.0	4.5.0	R3-021285	TEI
RP-020412	25.433	665		Rel-5	TFCI 0 definition for TDD	A	5.0.0	5.1.0	R3-021286	TEI
RP-020412	25.433	668	2	R99	NBAP Review – Alignment on the ASN.1	F	3.9.0	3.10.0	R3-021643	TEI
RP-020412	25.433	669	2	Rel-4	NBAP Review Alignment on the ASN.1	A	4.4.0	4.5.0	R3-021644	TEI
RP-020412	25.433	670	2	Rel-5	NBAP Review – Alignment on the ASN.1	A	5.0.0	5.1.0	R3-021645	TEI
RP-020412	25.433	671	1	Rel-4	NBAP Review Alignment of the ASN.1	A	4.4.0	4.5.0	R3-021604	TEI
RP-020412	25.433	672	1	Rel-5	NBAP Review Alignment of the ASN.1	A	5.0.0	5.1.0	R3-021605	TEI
RP-020412	25.433	684	1	R99	Clarification for the usage of the cause value	F	3.9.0	3.10.0	R3-021505	TEI
RP-020412	25.433	685	1	Rel-4	Clarification for the usage of the cause value	A	4.4.0	4.5.0	R3-021506	TEI
RP-020412	25.433	686	1	Rel-5	Clarification for the usage of the cause value	A	5.0.0	5.1.0	R3-021507	TEI
RP-020412	25.433	696	1	R99	TFCI2 bearer clarification	F	3.9.0	3.10.0	R3-021587	TEI
RP-020412	25.433	697	1	Rel-4	TFCI2 bearer clarification	A	4.4.0	4.5.0	R3-021588	TEI
RP-020412	25.433	698	1	Rel-5	TFCI2 bearer clarification	A	5.0.0	5.1.0	R3-021589	TEI
RP-020412	25.433	702		R99	NBAP Review – Alignment of the ASN.1	F	3.9.0	3.10.0	R3-021490	TEI

CR-Form-v5

CHANGE REQUEST

⌘ **25.433 CR 630** ⌘ rev **2** ⌘ Current version: **3.9.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Criticality Information Decoding Failure Handling		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May, 2002
Category:	⌘ F	Release:	⌘ R99
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)	R96 (Release 1996)	2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)	R97 (Release 1997)	
	B (addition of feature),	R98 (Release 1998)	
	C (functional modification of feature)	R99 (Release 1999)	
	D (editorial modification)	REL-4 (Release 4)	
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .	REL-5 (Release 5)	

Reason for change:	⌘ Section 10.3.2 specifies that “when the criticality information cannot even be decoded in a not comprehended IE or IE group, the Error Indication procedure shall be initiated with an appropriate cause value”. As all decoding errors result in an Error Indication procedure being sent with a cause value of Transfer Syntax error as specified in section 10.2, this specification statement is not required and causes confusion.
Summary of change:	⌘ The above-mentioned specification statement in section 10.3.2 is removed.
	<u>Impact analysis</u> Impact assessment towards the previous version of the specification (same release): The CR has isolated impact with the previous version of the specification (same release). The impact can be considered isolated because the change affects one (or more) system function(s), namely the error handling function and has the possibility to affect existing implementations even though the change is functional and protocol compatible.
Consequences if not approved:	⌘ The specification statement seems to indicate that when the criticality information cannot be decoded, it needs to be handled in a different way from handling Transfer Syntax protocol error. If not approved, this ambiguity will persist.

Clauses affected:	⌘ 10.3.2	
Other specs	⌘ <input checked="" type="checkbox"/> Other core specifications	⌘ 25.413 R99 CR 412, 25.413 R4 CR 413, 25.413 R5 CR 437, 25.419 R99 CR 095, 25.419 R4 CR 096, 25.419 R5 CR 097, 25.423 R99 CR 590, 25.423 R4 CR 591, 25.423 R5 CR 599, 25.433 R4 CR 631, 25.433 R5 CR 633, 25.453 R5 CR 017
affected:	<input type="checkbox"/> Test specifications	None.

O&M Specifications

Other comments: ☞

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ☞ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

10.2 Transfer Syntax Error

A Transfer Syntax Error occurs when the receiver is not able to decode the received physical message. Transfer syntax errors are always detected in the process of ASN.1 decoding. If a Transfer Syntax Error occurs, the receiver should initiate Error Indication procedure with appropriate cause value for the Transfer Syntax protocol error.

Examples for Transfer Syntax Errors are:

- Violation of value ranges in ASN.1 definition of messages. e.g.: If an IE has a defined value range of 0 to 10 (ASN.1: INTEGER (0..10)), and 12 will be received, then this will be treated as a transfer syntax error.
- Violation in list element constraints. e.g.: If a list is defined as containing 1 to 10 elements, and 12 elements will be received, then this case will be handled as a transfer syntax error.
- Missing mandatory elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).
- Wrong order of elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).

10.3 Abstract Syntax Error

10.3.1 General

An Abstract Syntax Error occurs when the receiving functional NBAP entity:

1. receives IEs or IE groups that cannot be understood (unknown id);
2. receives IEs for which the logical range is violated (e.g.: ASN.1 definition: 0 to 15, the logical range is 0 to 10 (values 11 to 15 are undefined), and 12 will be received; this case will be handled as an abstract syntax error using criticality information sent by the originator of the message);
3. does not receive IEs or IE groups but according to the specified presence of the concerning object, the IEs or IE groups should have been present in the received message;
4. receives IEs or IE groups that are defined to be part of that message in wrong order or with too many occurrences of the same IE or IE group;
5. receives IEs or IE groups but according to the conditional presence of the concerning object and the specified condition, the IEs or IE groups should not have been present in the received message.

Cases 1 and 2 (not comprehended IE/IE group) are handled based on received Criticality information. Case 3 (missing IE/IE group) is handled based on Criticality information and Presence information for the missing IE/IE group specified in the version of the specification used by the receiver. Case 4 (IEs or IE groups in wrong order or with too many occurrences) and Case 5 (erroneously present conditional IEs or IE groups) result in rejecting the procedure.

If an Abstract Syntax Error occurs, the receiver shall read the remaining message and shall then for each detected Abstract Syntax Error that belong to cases 1-3 act according to the Criticality Information and Presence Information for the IE/IE group due to which Abstract Syntax Error occurred in accordance with subclauses 10.3.4 and 10.3.5. The handling of cases 4 and 5 is specified in subclause 10.3.6.

10.3.2 Criticality Information

In the NBAP messages there is criticality information set for individual IEs and/or IE groups. This criticality information instructs the receiver how to act when receiving an IE or an IE group that is not comprehended, i.e. the entire item (IE or IE group) which is not (fully or partially) comprehended shall be treated in accordance with its own criticality information as specified in subclause 10.3.4.

In addition, the criticality information is used in case of the missing IE/IE group abstract syntax error (see subclause 10.3.5).

The receiving node shall take different actions depending on the value of the Criticality Information. The three possible values of the Criticality Information for an IE/IE group are:

- Reject IE
- Ignore IE and Notify Sender
- Ignore IE

The following rules restrict when a receiving entity may consider an IE, an IE group or an EP not comprehended (not implemented), and when action based on criticality information is applicable:

1. IE or IE group: When one new or modified IE or IE group is implemented for one EP from a standard version, then other new or modified IEs or IE groups specified for that EP in that standard version shall be considered comprehended by the receiving entity (some may still remain unsupported).

Note that this restriction is applicable to a sending entity for constructing messages.

2. EP: The comprehension of different EPs within a standard version or between different standard versions is not mandated. Any EP that is not supported may be considered not comprehended, even if another EP from that standard version is comprehended, and action based on criticality shall be applied.

~~When the criticality information cannot even be decoded in a not comprehended IE or IE group, the Error Indication procedure shall be initiated with an appropriate cause value.~~

10.3.3 Presence Information

For many IEs/IE groups which are optional according to the ASN.1 transfer syntax, NBAP specifies separately if the presence of these IEs/IE groups is optional or mandatory with respect to RNS application by means of the presence field of the concerning object of class NBAP-PROTOCOL-IES, NBAP-PROTOCOL-IES-PAIR, NBAP-PROTOCOL-EXTENSION or NBAP-PRIVATE-IES.

The presence field of the indicated classes supports three values:

1. Optional;
2. Conditional;
3. Mandatory.

If an IE/IE group is not included in a received message and the presence of the IE/IE group is mandatory or the presence is conditional and the condition is true according to the version of the specification used by the receiver, an abstract syntax error occurs due to a missing IE/IE group.

If an IE/IE group is included in a received message and the presence of the IE/IE group is conditional and the condition is false according to the version of the specification used by the receiver, an abstract syntax error occurs due to this erroneously present conditional IE/IE group.

10.3.4 Not comprehended IE/IE group

10.3.4.1 Procedure ID

The receiving node shall treat the different types of received criticality information of the *Procedure ID* according to the following:

Reject IE:

- If a message is received with a *Procedure ID* marked with "*Reject IE*" which the receiving node does not comprehend, the receiving node shall reject the procedure using the Error Indication procedure.

Ignore IE and Notify Sender:

- If a message is received with a *Procedure ID* marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the procedure and initiate the Error Indication procedure.

Ignore IE:

CHANGE REQUEST

⌘ **25.433 CR 631** ⌘ rev **2** ⌘ Current version: **4.4.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Criticality Information Decoding Failure Handling		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May, 2002
Category:	⌘ A	Release:	⌘ REL-4
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900.		REL-4 (Release 4)
			REL-5 (Release 5)

Reason for change:	⌘ Section 10.3.2 specifies that “when the criticality information cannot even be decoded in a not comprehended IE or IE group, the Error Indication procedure shall be initiated with an appropriate cause value”. As all decoding errors result in an Error Indication procedure being sent with a cause value of Transfer Syntax error as specified in section 10.2, this specification statement is not required and causes confusion.
Summary of change:	⌘ The above-mentioned specification statement in section 10.3.2 is removed.
	<u>Impact analysis</u> Impact assessment towards the previous version of the specification (same release): The CR has isolated impact with the previous version of the specification (same release). The impact can be considered isolated because the change affects one (or more) system function(s), namely the error handling function and has the possibility to affect existing implementations even though the change is functional and protocol compatible.
Consequences if not approved:	⌘ The specification statement seems to indicate that when the criticality information cannot be decoded, it needs to be handled in a different way from handling Transfer Syntax protocol error. If not approved, this ambiguity will persist.

Clauses affected:	⌘ 10.3.2	
Other specs	⌘ <input checked="" type="checkbox"/> Other core specifications	⌘ 25.413 R99 CR 412, 25.413 R4 CR 413, 25.413 R5 CR 437, 25.419 R99 CR 095, 25.419 R4 CR 096, 25.419 R5 CR 097, 25.423 R99 CR 590, 25.423 R4 CR 591, 25.423 R5 CR 599, 25.433 R99 CR 630, 25.433 R5 CR 633, 25.453 R5 CR 017
affected:	<input type="checkbox"/> Test specifications	None.

O&M Specifications

Other comments: ☞

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- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

10.2 Transfer Syntax Error

A Transfer Syntax Error occurs when the receiver is not able to decode the received physical message. Transfer syntax errors are always detected in the process of ASN.1 decoding. If a Transfer Syntax Error occurs, the receiver should initiate Error Indication procedure with appropriate cause value for the Transfer Syntax protocol error.

Examples for Transfer Syntax Errors are:

- Violation of value ranges in ASN.1 definition of messages. e.g.: If an IE has a defined value range of 0 to 10 (ASN.1: INTEGER (0..10)), and 12 will be received, then this will be treated as a transfer syntax error.
- Violation in list element constraints. e.g.: If a list is defined as containing 1 to 10 elements, and 12 elements will be received, then this case will be handled as a transfer syntax error.
- Missing mandatory elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).
- Wrong order of elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).

10.3 Abstract Syntax Error

10.3.1 General

An Abstract Syntax Error occurs when the receiving functional NBAP entity:

1. receives IEs or IE groups that cannot be understood (unknown id);
2. receives IEs for which the logical range is violated (e.g.: ASN.1 definition: 0 to 15, the logical range is 0 to 10 (values 11 to 15 are undefined), and 12 will be received; this case will be handled as an abstract syntax error using criticality information sent by the originator of the message);
3. does not receive IEs or IE groups but according to the specified presence of the concerning object, the IEs or IE groups should have been present in the received message;
4. receives IEs or IE groups that are defined to be part of that message in wrong order or with too many occurrences of the same IE or IE group;
5. receives IEs or IE groups but according to the conditional presence of the concerning object and the specified condition, the IEs or IE groups should not have been present in the received message.

Cases 1 and 2 (not comprehended IE/IE group) are handled based on received Criticality information. Case 3 (missing IE/IE group) is handled based on Criticality information and Presence information for the missing IE/IE group specified in the version of the specification used by the receiver. Case 4 (IEs or IE groups in wrong order or with too many occurrences) and Case 5 (erroneously present conditional IEs or IE groups) result in rejecting the procedure.

If an Abstract Syntax Error occurs, the receiver shall read the remaining message and shall then for each detected Abstract Syntax Error that belong to cases 1-3 act according to the Criticality Information and Presence Information for the IE/IE group due to which Abstract Syntax Error occurred in accordance with subclauses 10.3.4 and 10.3.5. The handling of cases 4 and 5 is specified in subclause 10.3.6.

10.3.2 Criticality Information

In the NBAP messages there is criticality information set for individual IEs and/or IE groups. This criticality information instructs the receiver how to act when receiving an IE or an IE group that is not comprehended, i.e. the entire item (IE or IE group) which is not (fully or partially) comprehended shall be treated in accordance with its own criticality information as specified in subclause 10.3.4.

In addition, the criticality information is used in case of the missing IE/IE group abstract syntax error (see subclause 10.3.5).

The receiving node shall take different actions depending on the value of the Criticality Information. The three possible values of the Criticality Information for an IE/IE group are:

- Reject IE
- Ignore IE and Notify Sender
- Ignore IE

The following rules restrict when a receiving entity may consider an IE, an IE group or an EP not comprehended (not implemented), and when action based on criticality information is applicable:

1. IE or IE group: When one new or modified IE or IE group is implemented for one EP from a standard version, then other new or modified IEs or IE groups specified for that EP in that standard version shall be considered comprehended by the receiving entity (some may still remain unsupported).

Note that this restriction is applicable to a sending entity for constructing messages.

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~~When the criticality information cannot even be decoded in a not comprehended IE or IE group, the Error Indication procedure shall be initiated with an appropriate cause value.~~

10.3.3 Presence Information

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If an IE/IE group is included in a received message and the presence of the IE/IE group is conditional and the condition is false according to the version of the specification used by the receiver, an abstract syntax error occurs due to this erroneously present conditional IE/IE group.

10.3.4 Not comprehended IE/IE group

10.3.4.1 Procedure ID

The receiving node shall treat the different types of received criticality information of the *Procedure ID* according to the following:

Reject IE:

- If a message is received with a *Procedure ID* marked with "*Reject IE*" which the receiving node does not comprehend, the receiving node shall reject the procedure using the Error Indication procedure.

Ignore IE and Notify Sender:

- If a message is received with a *Procedure ID* marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the procedure and initiate the Error Indication procedure.

Ignore IE:

CHANGE REQUEST

⌘ **25.433 CR 633** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Criticality Information Decoding Failure Handling		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May, 2002
Category:	⌘ A	Release:	⌘ REL-5
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change:	⌘ Section 10.3.2 specifies that “when the criticality information cannot even be decoded in a not comprehended IE or IE group, the Error Indication procedure shall be initiated with an appropriate cause value”. As all decoding errors result in an Error Indication procedure being sent with a cause value of Transfer Syntax error as specified in section 10.2, this specification statement is not required and causes confusion.
Summary of change:	⌘ The above-mentioned specification statement in section 10.3.2 is removed. <u>Impact analysis</u> Impact assessment towards the previous version of the specification (same release): The CR has isolated impact with the previous version of the specification (same release). The impact can be considered isolated because the change affects one (or more) system function(s), namely the error handling function and has the possibility to affect existing implementations even though the change is functional and protocol compatible.
Consequences if not approved:	⌘ The specification statement seems to indicate that when the criticality information cannot be decoded, it needs to be handled in a different way from handling Transfer Syntax protocol error. If not approved, this ambiguity will persist.

Clauses affected:	⌘ 10.3.2	
Other specs	⌘ <input checked="" type="checkbox"/> Other core specifications	⌘ 25.413 R99 CR 412, 25.413 R4 CR 413, 25.413 R5 CR 437, 25.419 R99 CR 095, 25.419 R4 CR 096, 25.419 R5 CR 097, 25.423 R99 CR 590, 25.423 R4 CR 591, 25.423 R5 CR 599, 25.433 R99 CR 630, 25.433 R4 CR 631, 25.453 R5 CR 017
affected:	<input type="checkbox"/> Test specifications	None.

O&M Specifications

Other comments: ☞

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Examples for Transfer Syntax Errors are:

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- Wrong order of elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).

10.3 Abstract Syntax Error

10.3.1 General

An Abstract Syntax Error occurs when the receiving functional NBAP entity:

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3. does not receive IEs or IE groups but according to the specified presence of the concerning object, the IEs or IE groups should have been present in the received message;
4. receives IEs or IE groups that are defined to be part of that message in wrong order or with too many occurrences of the same IE or IE group;
5. receives IEs or IE groups but according to the conditional presence of the concerning object and the specified condition, the IEs or IE groups should not have been present in the received message.

Cases 1 and 2 (not comprehended IE/IE group) are handled based on received Criticality information. Case 3 (missing IE/IE group) is handled based on Criticality information and Presence information for the missing IE/IE group specified in the version of the specification used by the receiver. Case 4 (IEs or IE groups in wrong order or with too many occurrences) and Case 5 (erroneously present conditional IEs or IE groups) result in rejecting the procedure.

If an Abstract Syntax Error occurs, the receiver shall read the remaining message and shall then for each detected Abstract Syntax Error that belong to cases 1-3 act according to the Criticality Information and Presence Information for the IE/IE group due to which Abstract Syntax Error occurred in accordance with subclauses 10.3.4 and 10.3.5. The handling of cases 4 and 5 is specified in subclause 10.3.6.

10.3.2 Criticality Information

In the NBAP messages there is criticality information set for individual IEs and/or IE groups. This criticality information instructs the receiver how to act when receiving an IE or an IE group that is not comprehended, i.e. the entire item (IE or IE group) which is not (fully or partially) comprehended shall be treated in accordance with its own criticality information as specified in subclause 10.3.4.

In addition, the criticality information is used in case of the missing IE/IE group abstract syntax error (see subclause 10.3.5).

The receiving node shall take different actions depending on the value of the Criticality Information. The three possible values of the Criticality Information for an IE/IE group are:

- Reject IE
- Ignore IE and Notify Sender
- Ignore IE

The following rules restrict when a receiving entity may consider an IE, an IE group or an EP not comprehended (not implemented), and when action based on criticality information is applicable:

1. IE or IE group: When one new or modified IE or IE group is implemented for one EP from a standard version, then other new or modified IEs or IE groups specified for that EP in that standard version shall be considered comprehended by the receiving entity (some may still remain unsupported).

Note that this restriction is applicable to a sending entity for constructing messages.

2. EP: The comprehension of different EPs within a standard version or between different standard versions is not mandated. Any EP that is not supported may be considered not comprehended, even if another EP from that standard version is comprehended, and action based on criticality shall be applied.

~~When the criticality information cannot even be decoded in a not comprehended IE or IE group, the Error Indication procedure shall be initiated with an appropriate cause value.~~

10.3.3 Presence Information

For many IEs/IE groups which are optional according to the ASN.1 transfer syntax, NBAP specifies separately if the presence of these IEs/IE groups is optional or mandatory with respect to RNS application by means of the presence field of the concerning object of class NBAP-PROTOCOL-IES, NBAP-PROTOCOL-IES-PAIR, NBAP-PROTOCOL-EXTENSION or NBAP-PRIVATE-IES.

The presence field of the indicated classes supports three values:

1. Optional;
2. Conditional;
3. Mandatory.

If an IE/IE group is not included in a received message and the presence of the IE/IE group is mandatory or the presence is conditional and the condition is true according to the version of the specification used by the receiver, an abstract syntax error occurs due to a missing IE/IE group.

If an IE/IE group is included in a received message and the presence of the IE/IE group is conditional and the condition is false according to the version of the specification used by the receiver, an abstract syntax error occurs due to this erroneously present conditional IE/IE group.

10.3.4 Not comprehended IE/IE group

10.3.4.1 Procedure ID

The receiving node shall treat the different types of received criticality information of the *Procedure ID* according to the following:

Reject IE:

- If a message is received with a *Procedure ID* marked with "*Reject IE*" which the receiving node does not comprehend, the receiving node shall reject the procedure using the Error Indication procedure.

Ignore IE and Notify Sender:

- If a message is received with a *Procedure ID* marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the procedure and initiate the Error Indication procedure.

Ignore IE:

CHANGE REQUEST

⌘ **25.433 CR 634** ⌘ ev **1** ⌘ Current version: **3.9.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Alignment of tabular and ASN.1 coding for DL power, Uplink SIR, and Primary CPICH Power				
Source:	⌘ R-WG3				
Work item code:	⌘ TEI	Date:	⌘ May, 2002		
Category:	⌘ F	Release:	⌘ R99		
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:		
	F (correction)		2	(GSM Phase 2)	
	A (corresponds to a correction in an earlier release)		R96	(Release 1996)	
	B (addition of feature),		R97	(Release 1997)	
	C (functional modification of feature)		R98	(Release 1998)	
	D (editorial modification)		R99	(Release 1999)	
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		REL-4	(Release 4)	
			REL-5	(Release 5)	

Reason for change:	⌘	The DL power IE, Uplink SIR, and Primary CPICH are defined in ASN.1 to be of type INTEGER, whereas in the tabular coding definitions it is defined to be of type ENUMERATED. In addition, the ASN.1 comments for the DL Power IE define a mapping of values which are outside the supported range- this should be removed as this should be clear from the value range. Rev. 1: Complete alignment of semantics description in tabular format
Summary of change:	⌘	The type definitions of the DL power IE, Uplink SIR and Primary CPICH as given in Section 9.2 are changed to INTEGER.
Consequences if not approved:	⌘	The difference in type definition between the tabular and ASN.1 coding is an obvious contradiction, which should be removed to avoid confusion. Impact Analysis: Impact assessment towards the previous version of the specification (same release): This CR has no impact on the previous version of the specification (same release) because Section 9.3.0 states that in case of contradictions, the ASN.1 shall take precedence. <u>ONLY if there is impact:</u>

Clauses affected:	⌘	9.2.1.21, 9.2.2.58, 9.2.2.33, 9.3.4
Other specs affected:	⌘	<input checked="" type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
Other comments:	⌘	CR 600 RNSAP

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ☒ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.2.1.21 DL Power

The DL Power IE indicates a power level relative to the [FDD-primary CPICH power] [TDD-primary CCPCH power] configured in a cell [FDD-If referred to a DPCH, it indicates the power of the transmitted DPDCH symbols]. [FDD-If referred to a DL-DPCCH for CPCH, it indicates the power of the transmitted pilot symbols].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DL Power			INTEGER Enumerated (-350..+150dB)	Value = DL Power /10 Unit dB Range -35.0 .. +15.0 Step 0.1dB

-----other parts removed -----

9.2.2.58 UL SIR

The UL SIR indicates a received UL SIR.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UL SIR			INTEGER Enumerated (-8.2..17.3)	Value = UL SIR/10 Unit dB Step 0.1 dB Range -8.2..+17.3 Step 0.1 dB

-----other parts removed -----

9.2.2.33 Primary CPICH Power

Primary CPICH power is the power that shall be used for transmitting the P-CPICH in a cell. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Primary CPICH power			INTEGER Enumerated (-100..50)	Value = Primary CPICH Power/10 Unit dBm Range -10.0..+50.0 Step Granularity 0.1 dB

-----other parts removed -----

9.3.4 Information Elements Definitions

```

*****
--
-- Information Element Definitions
--
*****
    
```

-----other parts removed -----

```

DL-Power ::= INTEGER (-350..150)
-- DL-Power = power * 10
-- If Power <= -35 DL Power shall be set to -350
-- if Power >=15 DL Power shall be set to 150
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB
    
```


CHANGE REQUEST

⌘ **25.433 CR 635** ⌘ ev **1** ⌘ Current version: **4.4.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Alignment of tabular and ASN.1 coding for DL power, Uplink SIR, and Primary CPICH Power				
Source:	⌘ R-WG3				
Work item code:	⌘ TEI	Date:	⌘ May, 2002		
Category:	⌘ A	Release:	⌘ REL-4		
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:		
	F (correction)		2	(GSM Phase 2)	
	A (corresponds to a correction in an earlier release)		R96	(Release 1996)	
	B (addition of feature),		R97	(Release 1997)	
	C (functional modification of feature)		R98	(Release 1998)	
	D (editorial modification)		R99	(Release 1999)	
	Detailed explanations of the above categories can be found in 3GPP TR 21.900.		REL-4	(Release 4)	
			REL-5	(Release 5)	

Reason for change:	⌘	<p>The DL power IE, Uplink SIR, and Primary CPICH are defined in ASN.1 to be of type INTEGER, whereas in the tabular coding definitions it is defined to be of type ENUMERATED. In addition, the ASN.1 comments for the DL Power IE define a mapping of values which are outside the supported range- this should be removed as this should be clear from the value range.</p> <p>Rev 1: complete alignment of semantics description in the tabular format.</p>
Summary of change:	⌘	The type definitions of the DL power IE, Uplink SIR and Primary CPICH as given in Section 9.2 are changed to INTEGER.
Consequences if not approved:	⌘	<p>The difference in type definition between the tabular and ASN.1 coding is an obvious contradiction, which should be removed to avoid confusion.</p> <p>Impact Analysis:</p> <p>Impact assessment towards the previous version of the specification (same release):</p> <p>This CR has no impact on the previous version of the specification (same release) because Section 9.3.0 states that in case of contradictions, the ASN.1 shall take precedence.</p> <p><u>ONLY if there is impact:</u></p>

Clauses affected:	⌘	9.2.1.21, 9.2.1.67A, 9.2.2.33, 9.3.4
Other specs affected:	⌘	<input checked="" type="checkbox"/> Other core specifications ⌘ CR 601 RNSAP <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
Other comments:	⌘	

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ☒ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.2.1.21 DL Power

The DL Power IE indicates a power level relative to the [FDD-primary CPICH power] [TDD-primary CCPCH power] configured in a cell [FDD-If referred to a DPCH, it indicates the power of the transmitted DPDCH symbols]. [FDD-If referred to a DL-DPCCH for CPCH, it indicates the power of the transmitted pilot symbols].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DL Power			INTEGER enumerated (-350..+150dB)	Value = DL Power /10 Unit dB Range -35.0 .. +15.0 Step 0.1dB

-----other parts removed -----

9.2.1.67A UL SIR

The UL SIR indicates a received UL SIR.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UL SIR			INTEGER enumerated (-8.2..17.3)	Value = UL SIR/10 Unit dB Step 0.1 dB Range -8.2..+17.3 Step 0.1 dB

-----other parts removed -----

9.2.2.33 Primary CPICH Power

Primary CPICH power is the power that shall be used for transmitting the P-CPICH in a cell. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Primary CPICH power			INTEGER enumerated (-100..500)	Value = Primary CPICH Power/10 Unit dBm Range -10.0..+50.0 Step Granularity 0.1 dB

-----other parts removed -----

9.3.4 Information Elements Definitions

```

*****
--
-- Information Element Definitions
--
*****
    
```

-----other parts removed -----

```

DL-Power ::= INTEGER (-350..150)
-- DL-Power = power * 10
-- If Power <= -35 DL Power shall be set to -350
-- if Power >=15 DL Power shall be set to 150
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB
    
```


CHANGE REQUEST

⌘ **25.433 CR 636** ⌘ ev **1** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Alignment of tabular and ASN.1 coding for DL power, Uplink SIR, and Primary CPICH Power				
Source:	⌘ R-WG3				
Work item code:	⌘ TEI	Date:	⌘ May, 2002		
Category:	⌘ A	Release:	⌘ REL-5		
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:		
	F (correction)		2	(GSM Phase 2)	
	A (corresponds to a correction in an earlier release)		R96	(Release 1996)	
	B (addition of feature),		R97	(Release 1997)	
	C (functional modification of feature)		R98	(Release 1998)	
	D (editorial modification)		R99	(Release 1999)	
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		REL-4	(Release 4)	
			REL-5	(Release 5)	

Reason for change:	⌘	<p>The DL power IE, Uplink SIR, and Primary CPICH are defined in ASN.1 to be of type INTEGER, whereas in the tabular coding definitions it is defined to be of type ENUMERATED. In addition, the ASN.1 comments for the DL Power IE define a mapping of values which are outside the supported range- this should be removed as this should be clear from the value range.</p> <p>Rev 1: complete alignment of semantics description in the tabular format.</p>
Summary of change:	⌘	The type definitions of the DL power IE, Uplink SIR and Primary CPICH as given in Section 9.2 are changed to INTEGER.
Consequences if not approved:	⌘	<p>The difference in type definition between the tabular and ASN.1 coding is an obvious contradiction, which should be removed to avoid confusion.</p> <p>Impact Analysis:</p> <p>Impact assessment towards the previous version of the specification (same release):</p> <p>This CR has no impact on the previous version of the specification (same release) because Section 9.3.0 states that in case of contradictions, the ASN.1 shall take precedence.</p> <p><u>ONLY if there is impact:</u></p>

Clauses affected:	⌘	9.2.1.21, 9.2.1.67A, 9.2.2.33, 9.3.4
Other specs affected:	⌘	<input checked="" type="checkbox"/> Other core specifications ⌘ CR 602 RNSAP <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
Other comments:	⌘	

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ☞ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.2.1.21 DL Power

The DL Power IE indicates a power level relative to the [FDD-primary CPICH power] [TDD-primary CCPCH power] configured in a cell [FDD-If referred to a DPCH, it indicates the power of the transmitted DPDCH symbols]. [FDD-If referred to a DL-DPCCH for CPCH, it indicates the power of the transmitted pilot symbols].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DL Power			INTEGER Enumerated (-350..+150dB)	Value = DL Power /10 Unit dB Range -35.0 .. +15.0 Step 0.1dB

-----other parts removed -----

9.2.1.67A UL SIR

The UL SIR indicates a received UL SIR.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UL SIR			INTEGER Enumerated (-8.2..+17.3)	Value = UL SIR/10 Unit dB Step 0.1 dB Range -8.2..+17.3 Step 0.1 dB

-----other parts removed -----

9.2.2.33 Primary CPICH Power

Primary CPICH power is the power that shall be used for transmitting the P-CPICH in a cell. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Primary CPICH power			INTEGER Enumerated (-100..+50)	Value = Primary CPICH Power/10 Unit dBm Range -10.0..+50.0 Step Granularity 0.1 dB

-----other parts removed -----

9.3.4 Information Elements Definitions

```

*****
--
-- Information Element Definitions
--
*****
    
```

-----other parts removed -----

```

DL-Power ::= INTEGER (-350..150)
-- DL-Power = power * 10
-- If Power <= -35 DL Power shall be set to -350
-- if Power >=15 DL Power shall be set to 150
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB
    
```


CR-Form-v5

CHANGE REQUEST

⌘ **25.433 CR 637** ⌘ ev **1** ⌘ Current version: **3.9.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Correction to RL Restore Indication		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ 5-2002
Category:	⌘ F	Release:	⌘ R99
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change:	⌘ Uu synchronisation in FDD can only be restored for a Radio Link Set. Only in TDD can Uu synchronisation be stored for a single Radio Link. This CR ensures that the restoration of synchronisation for a single radio link is only possible in TDD.
Summary of change:	⌘ Addition of TDD tagging to the tabular format of the RL Restore Indication message. R1: Addition of ASN.1 alignment Impact Analysis: Impact assessment towards the previous version of the specification (same release): There is no impact on the intended behaviour of the procedure.
Consequences if not approved:	⌘ There would be a misalignment with the correct procedure text associated with the RL Restore procedure.

Clauses affected:	⌘ 9.1.59; 9.3.3		
Other specs	⌘ <input checked="" type="checkbox"/> Other core specifications	⌘	25.433 v4.4.0 (CR638) 25.433 v5.0.0 (CR639) 25.423 v3.9.0 (CR603) 25.423 v4.4.0 (CR604) 25.423 v5.0.0 (CR605)
affected:	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘		

How to create CRs using this form:

Release 99

3GPP TS 25.433 v3.9.0 (2002- 03)

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.1.59 RADIO LINK RESTORE INDICATION

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	ignore
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		-	
CHOICE Reporting Object	M			Object for which the Restoration shall be reported.	YES	ignore
>RL				TDD only	-	
>>Radio Link Information		1 to <MaxnoofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		-	
>RL Set				FDD only	-	ignore
>>RL Set Information		1 to <MaxnoofRLSets>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		-	
>CCTrCH				TDD only		
>>RL ID	M		9.2.1.53			
>>CCTrCH List		1 to <MaxnoCCTrCH>			EACH	ignore
>>>CCTrCH ID	M		CCTrCH ID 9.2.3.3		-	

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.
MaxnoofRLSets	Maximum number of RL Sets for one UE.
MaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.3.3 PDU Definitions

```
-- *****
--
-- RADIO LINK RESTORE INDICATION
--
-- *****
```

```
RadioLinkRestoreIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkRestoreIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkRestoreIndication-Extensions}},
    OPTIONAL,
    ...
}
```

```

}

RadioLinkRestoreIndication-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID CRITICALITY ignore TYPE CRNC-
CommunicationContextID PRESENCE mandatory } |
  { ID id-Reporting-Object-RL-RestoreInd CRITICALITY ignore TYPE Reporting-
Object-RL-RestoreInd PRESENCE mandatory },
  ...
}

RadioLinkRestoreIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Reporting-Object-RL-RestoreInd ::= CHOICE {
  rL RL-RL-RestoreInd, --TDD only
  rL-Set RL-Set-RL-RestoreInd, --FDD only
  ...,
  CCTrCH CCTrCH-RL-RestoreInd --TDD only
}

RL-RL-RestoreInd ::= SEQUENCE {
  rL-InformationList-RL-RestoreInd RL-InformationList-RL-RestoreInd,
  iE-Extensions ProtocolExtensionContainer { { RLItem-RL-RestoreInd-ExtIEs } }
  OPTIONAL,
  ...
}

RLItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

CR-Form-v5

CHANGE REQUEST

⌘ **25.433 CR 638** ⌘ ev **1** ⌘ Current version: **4.4.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Correction to RL Restore Indication		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ 5-2002
Category:	⌘ A	Release:	⌘ R4
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change:	⌘ Uu synchronisation in FDD can only be restored for a Radio Link Set. Only in TDD can Uu synchronisation be stored for a single Radio Link. This CR ensures that the restoration of synchronisation for a single radio link is only possible in TDD.
Summary of change:	⌘ Addition of TDD tagging to the tabular format of the RL Restore Indication message. R1: Addition of ASN.1 alignment. Impact Analysis: Impact assessment towards the previous version of the specification (same release): There is no impact on the intended behaviour of the procedure.
Consequences if not approved:	⌘ There would be a misalignment with the correct procedure text associated with the RL Restore procedure.

Clauses affected:	⌘ 9.1.59; 9.3.3		
Other specs	⌘ <input checked="" type="checkbox"/> Other core specifications	⌘	25.433 v3.9.0 (CR637) 25.433 v5.0.0 (CR639) 25.423 v3.9.0 (CR603) 25.423 v4.4.0 (CR604) 25.423 v5.0.0 (CR605)
affected:	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘		

How to create CRs using this form:

Release 5

3GPP TS 25.433 v4.4.0 (2002- 03)

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.1.59 RADIO LINK RESTORE INDICATION

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	ignore
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		-	
CHOICE Reporting Object	M			Object for which the Restoration shall be reported.	YES	ignore
>RL				TDD only	-	
>>Radio Link Information		1 to <MaxnoofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		-	
>RL Set				FDD only	-	
>>RL Set Information		1 to <MaxnoofRLSets>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		-	
>CCTrCH				TDD only		
>>RL ID	M		9.2.1.53			
>>CCTrCH List		1 to <MaxnoCCTrCH>			EACH	ignore
>>>CCTrCH ID	M		CCTrCH ID 9.2.3.3		-	

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.
MaxnoofRLSets	Maximum number of RL Sets for one UE.
MaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.3.3 PDU Definitions

```
-- *****
--
-- RADIO LINK RESTORE INDICATION
--
-- *****
```

```
RadioLinkRestoreIndication ::= SEQUENCE {
```

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```
protocolIEs          ProtocolIE-Container    {{RadioLinkRestoreIndication-IEs}},
protocolExtensions   ProtocolExtensionContainer {{RadioLinkRestoreIndication-Extensions}}
...
}

RadioLinkRestoreIndication-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CRNC-CommunicationContextID      CRITICALITY  ignore      TYPE      CRNC-
CommunicationContextID      PRESENCE      mandatory  } |
  { ID      id-Reporting-Object-RL-RestoreInd  CRITICALITY  ignore      TYPE      Reporting-
Object-RL-RestoreInd      PRESENCE      mandatory  },
  ...
}

RadioLinkRestoreIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Reporting-Object-RL-RestoreInd ::= CHOICE {
  rL          RL-RL-RestoreInd, --TDD only
  rL-Set      RL-Set-RL-RestoreInd, --FDD only
  ... ,
  cCTrCH      CCTrCH-RL-RestoreInd --TDD only
}
```

CHANGE REQUEST

⌘ **25.433 CR 639** ⌘ ev **1** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Correction to RL Restore Indication		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ 5-2002
Category:	⌘ A	Release:	⌘ R5
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change:	⌘ Uu synchronisation in FDD can only be restored for a Radio Link Set. Only in TDD can Uu synchronisation be stored for a single Radio Link. This CR ensures that the restoration of synchronisation for a single radio link is only possible in TDD.
Summary of change:	⌘ Addition of TDD tagging to the tabular format of the RL Restore Indication message. R1: Addition of ASN.1 alignment. Impact Analysis: Impact assessment towards the previous version of the specification (same release): There is no impact on the intended behaviour of the procedure.
Consequences if not approved:	⌘ There would be a misalignment with the correct procedure text associated with the RL Restore procedure.

Clauses affected:	⌘ 9.1.59; 9.3.3		
Other specs	⌘ <input checked="" type="checkbox"/> Other core specifications	⌘	25.423 v5.0.0 (CR605) 25.423 v4.4.0 (CR604) 25.423 v3.9.0 (CR603) 25.433 v4.4.0 (CR637) 25.433 v3.9.0 (CR638)
affected:	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘		

How to create CRs using this form:

Release 5

3GPP TS 25.433 v5.0.0 (2002- 03)

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.1.59 RADIO LINK RESTORE INDICATION

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	ignore
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		-	
CHOICE Reporting Object	M			Object for which the Restoration shall be reported.	YES	ignore
>RL				TDD only	-	
>>Radio Link Information		1 to <MaxnoofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		-	
>RL Set				FDD only	-	
>>RL Set Information		1 to <MaxnoofRLSets>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		-	
>CCTrCH				TDD only		
>>RL ID	M		9.2.1.53			
>>CCTrCH List		1 to <MaxnoCCTrCHs>			EACH	ignore
>>>CCTrCH ID	M		CCTrCH ID 9.2.3.3		-	

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.
MaxnoofRLSets	Maximum number of RL Sets for one UE.
MaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.3.3 PDU Definitions

```
-- *****
--
-- RADIO LINK RESTORE INDICATION
--
-- *****
```

```
RadioLinkRestoreIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkRestoreIndication-IEs}},
```

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```
protocolExtensions      ProtocolExtensionContainer  {{RadioLinkRestoreIndication-Extensions}}
...
}

RadioLinkRestoreIndication-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CRNC-CommunicationContextID      CRITICALITY      ignore      TYPE      CRNC-
CommunicationContextID      PRESENCE      mandatory      } |
  { ID      id-Reporting-Object-RL-RestoreInd    CRITICALITY      ignore      TYPE      Reporting-
Object-RL-RestoreInd      PRESENCE      mandatory      },
  ...
}

RadioLinkRestoreIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Reporting-Object-RL-RestoreInd ::= CHOICE {
  rL              RL-RL-RestoreInd, --TDD only
  rL-Set          RL-Set-RL-RestoreInd, --FDD only
  ...,
  cCTrCH         CCTrCH-RL-RestoreInd --TDD only
}
|
```

CHANGE REQUEST

⌘ **25.433 CR 646** ⌘ rev **-** ⌘ Current version: **3.9.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Use of PDSCH RL ID for TDD DSCH/USCH		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May 2002
Category:	⌘ F	Release:	⌘ R99
<p>Use <u>one</u> of the following categories:</p> <p>F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p>	

Reason for change:	<p>⌘ DSCH RNTI is a new identifier used in FDD with PDSCH RL ID for DSCH MAC-c/sh multiplexing. CRs for DSCH RNTI were approved at last RAN meeting. Although TDD does not have this particular MAC problem, it does have a similar problem in that the RRC signalling used on the SHCCH to allocate DSCH and USCH needs this same unique identity and thus needs to use PDSCH RL ID. It is therefore proposed to use PDSCH RL ID for TDD DSCH/USCH signalling where needed. PDSCH RL ID which is used in RL SETUP REQUEST and RADIO LINK RECONFIGURATION PREPARE FDD messages is now also added to TDD messages.</p> <p>This proposal aligns TDD to the already approved changes in 25.331.</p>
Summary of change:	<p>⌘ New procedure sections are added in 8.2.17.2 and 8.3.2.2 to indicate TDD use of PDSCH RL ID. Section 9.1.36.2: tabular modification to RADIO LINK SETUP REQUEST. Section 9.1.42.2: tabular modification to RADIO LINK RECONFIGURATION PREPARE. ASN.1 is added.</p>
Consequences if not approved:	<p>⌘ The same problem that was identified and fixed in FDD will not be fixed in TDD. In addition the use of PDSCH RL ID would be misaligned between WG2 and WG3 and the use of PDSCH RL ID would be misaligned between FDD and TDD for this specification.</p> <p>Impact assessment towards the previous version of the specification (same release):</p> <p>This CR has isolated impact with the previous version of the specification (same release) because it affects implementations supporting the corrected functionality,</p>

i.e. TDD DSCH/USCH setup and establishment.

Clauses affected:	⌘	8.2.17.2, 8.3.2.2, 9.1.36.2, 9.1.42.2, 9.3.2, 9.3.4, 9.3.6		
Other specs	⌘	<input checked="" type="checkbox"/> Other core specifications	⌘	TS 25.433 v4.4.0 CR647 TS 25.433 v5.0.0 CR648
affected:		<input type="checkbox"/> Test specifications		
		<input type="checkbox"/> O&M Specifications		
Other comments:	⌘			

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

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- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.2.17 Radio Link Setup

8.2.17.1 General

This procedure is used for establishing the necessary resources for a new Node B Communication Context in the Node B.

[FDD – The RL Setup procedure is used to establish one or more radio links. The procedure establishes one or more DCHs on all radio links, and in addition, it can include the establishment of one or more DSCHs on one radio link.]

[TDD – The RL Setup procedure is used for establish one radio link including one or more transport channels. The transport channels can be a mix of DCHs, DSCHs, and USCHs, including also combinations where one or more transport channel types are not present.]

8.2.17.2 Successful Operation

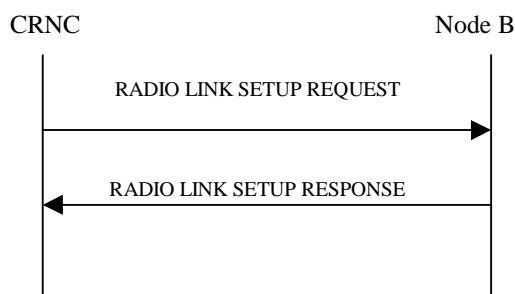


Figure 24: Radio Link Setup procedure, Successful Operation

The procedure is initiated with a RADIO LINK SETUP REQUEST message sent from the CRNC to Node B.

Upon reception of RADIO LINK SETUP REQUEST message, the Node B shall reserve necessary resources and configure the new Radio Link(s) according to the parameters given in the message.

The Node B shall prioritise resource allocation for the RL(s) to be established according to Annex A.

Transport Channels Handling:

DCH(s):

[TDD – If the *DCH Information* IE is present, the Node B shall configure the new DCH(s) according to the parameters given in the message.]

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs then, the Node B shall treat the DCHs in the *DCH Information* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.

[FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]

For a set of co-ordinated DCHs the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD - If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected" the Physical channel BER shall be used for the QE, ref. [16]].

The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The received *Frame Handling Priority* IE specified for each Transport Channel should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new RL(s) has been activated.

[FDD – The *Diversity Control Field* IE indicates for each RL (except the first RL in the message) whether the Node B shall combine the concerned RL or not. If the *Diversity Control Field* IE is set to "May", then Node B shall decide for either of the alternatives. If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL. Diversity combining is applied to Dedicated Transport Channels (DCH), i.e. it is not applied to the DSCHs. When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with. If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.]

[FDD – In the RADIO LINK SETUP RESPONSE message the Node B shall indicate with the *Diversity Indication* IE whether the RL is combined or not. In case of combining, only the *Reference RL ID* IE shall be included to indicate one of the existing RLs that the concerned RL is combined with. In case of not combining the Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]

[TDD – The Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]

In case of coordinated DCH, the *Binding ID* IE and the *Transport Layer Address* IE shall be specified for only one of the coordinated DCHs.

DSCH(s):

If the *DSCH Information* IE is present, the Node B shall configure the new DSCH(s) according to the parameters given in the message.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *TFCI2 Bearer Information* IE then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received. The Node B shall manage the time of arrival of these frames according to the values of ToAWS and ToAWE specified in the IE's. The *Binding ID* IE and *Transport Layer Address* IE for the new bearer to be set up for this purpose shall be returned in the RADIO LINK SETUP RESPONSE message.]

The Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DSCH of this RL.

[TDD – USCH(s)]:

[TDD – If the *USCH Information* IE is present, the Node B shall configure the new USCH(s) according to the parameters given in the message.]

[TDD – In case the *USCH Information* IE is present, the Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each USCH of this RL.]

Physical Channels Handling:

[FDD - Compressed Mode]:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the information about the Transmission Gap Pattern Sequences to be used in the Compressed Mode Configuration. This Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[FDD – If the *Downlink compressed mode method* IE in one or more Transmission Gap Pattern Sequence is set to 'SF/2' in the RADIO LINK SETUP REQUEST message, the Node B shall use or not the alternate scrambling code as indicated for each DL Channelisation Code in the *Transmission Gap Pattern Sequence Code Information* IE.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE and the *Active Pattern Sequence Information* IE, the Node B shall use the information to activate the indicated Transmission Gap Pattern Sequence(s) in the new RL. The received *CM Configuration Change CFN* IE refers to the latest passed CFN with that value. The Node B shall treat the received *TGCFN* IEs as follows:]

- [FDD - If any received *TGCFN* IE has the same value as the received *CM Configuration Change CFN* IE, the Node B shall consider the concerning Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD - If any received *TGCFN* IE does not have the same value as the received *CM Configuration Change CFN* IE but the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN* IE has already passed, the Node B shall consider the concerning Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD - For all other Transmission Gap Pattern Sequences included in the *Active Pattern Sequence Information* IE, the Node B shall activate each Transmission Gap Pattern Sequence at the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN* IE for the Transmission Gap Pattern Sequence.]

[FDD - DL Code Information]:

[FDD – When more than one DL DPDCH is assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]

[TDD – PDSCH RL ID]:

[TDD – If the *PDSCH RL ID* IE is included in RADIO LINK SETUP REQUEST message, the Node B shall use the PDSCH RL ID as an identifier for the PDSCH and/or PUSCH in this radio link.]

General:

[FDD – If the *Propagation Delay* IE is included, the Node B may use this information to speed up the detection of L1 synchronisation.]

[FDD – The *UL SIR Target* IE included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control.]

[FDD – If the received *Limited Power Increase* IE is set to 'Used', the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control.]

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP message indicates that there shall be a hard split on the TFCI field but the *TFCI2 Bearer Information* IE is not included in the message then the Node B shall transmit the TFCI2 field with zero power.]

[FDD - If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information* IE is included in the message then the Node B shall transmit the TFCI2 field with zero power until Synchronization is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer (see ref.[24]).]

Radio Link Handling:**[FDD - Transmit Diversity]:**

[FDD – When *Diversity Mode* IE is "STTD", "Closedloop mode1", or "Closedloop mode2", the Node B shall activate/deactivate the Transmit Diversity to each Radio Link in accordance with *Transmit Diversity Indication* IE.]

DL Power Control:

[FDD – The Node B shall start the DL transmission using the initial DL power specified in the message on each DL DPCH of the RL until either UL synchronisation on the Uu is achieved for the RLS or Power Balancing is activated. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) with DPC MODE=0 and the power control procedure (see subclause 8.3.7), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message. During compressed mode, the $P_{STR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]

[TDD – The Node B shall start the DL transmission using the initial DL power specified in the message on each DL DPCH of the RL until the UL synchronisation on the Uu is achieved for the RL. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3), but shall always be kept within the maximum and minimum limit specified in the RL SETUP REQUEST message.]

[TDD – If the *DL Time Slot ISCP Info* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged].

[FDD – If the received *Inner Loop DL PC Status* IE is set to "Active", the Node B shall activate the inner loop DL power control for all RLs. If *Inner Loop DL PC Status* IE is set to "Inactive", the Node B shall deactivate the inner loop DL power control for all RLs according to ref. [10].]

General:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE and the *S-Field Length* IE, the Node B shall activate SSDT, if supported, using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

[FDD – Irrespective of SSDT activation, the Node B shall include in the RADIO LINK SETUP RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK SETUP REQUEST message requested SSDT activation and the RADIO LINK SETUP RESPONSE message indicates that the SSDT capability is supported for this RL, SSDT shall be activated in the Node B.]

[FDD - Radio Link Set Handling]:

[FDD – The *First RLS Indicator* IE indicates if the concerning RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the Node B together with the value of the *DL TPC pattern 01 count* IE which the Node B has received in the Cell Setup procedure, to determine the initial TPC pattern in the DL of the concerning RL and all RLs which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication context.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication context.]

[FDD –The UL out-of-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the maximum value of the parameters N_OUTSYNC_IND and T_RLFAILURE, and the minimum value of the parameters N_INSYNC_IND, that are configured in the cells supporting the radio links of the RL Set].

***** UNAFFECTED TEXT *****

8.3.2 Synchronised Radio Link Reconfiguration Preparation

8.3.2.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one UE-UTRAN connection within a Node B.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.2.2 Successful Operation

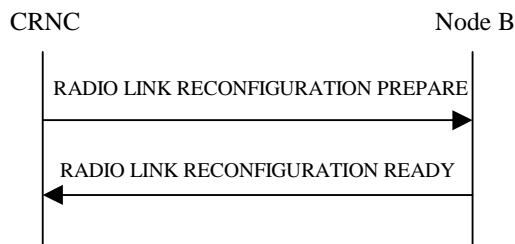


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the CRNC by sending the message RADIO LINK RECONFIGURATION PREPARE to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Modify* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the UL of a DCH, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the DL of a DCH, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.

- If the *DCHs to Modify* IE includes multiple *DCH Specific Info* IEs then the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs to Modify* IE includes the *UL FP Mode* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Add* IE includes multiple *DCH specific Info* IEs then, the Node B shall treat the DCHs in the *DCHs to Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD – If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected" the Physical channel BER shall be used for the QE, ref. [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Delete* IEs, the Node B shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of coordinated DCHs are requested to be deleted, the Node B shall not include this set of coordinated DCHs in the new configuration.

Physical Channel Modification:

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *UL DPCH Information* IE then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPDCHs* IE (if it is included) in the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]
- [FDD – If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD – The Node B shall use the *TFCS* IE for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL DPCCH Slot Format* IE, the Node B shall set the new Uplink DPCCH Structure to the new configuration.]
- [FDD - If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the Node B shall apply diversity according to the given value.]
- [FDD – If the *UL DPCH Information* IE includes an *SSDT Cell Identity Length* IE and/or an *S-Field Length* IE, the Node B shall apply the values in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information* IE then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – The Node B shall use the *TFCS* IE for the DL (if it is present) when reserving resources for the downlink of the new configuration. The Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE or the *TFCI Presence* IE, the Node B shall use the information when building TFCIs in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *DL DPCCH Slot Format* IE, group the Node B shall set the new Downlink DPCCH Structure to the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the Node B shall apply the indicated multiplexing type in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to 'Used', the Node B shall, if supported, use Limited Power Increase ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to 'Not Used', the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH code mapping* IE then the Node B shall apply the defined mapping between TFCI values and PDSCH channelisation codes.]

- [FDD – If the *DL DPCH Information* IE includes the *PDSCH RL ID* IE then the Node B shall infer that the PDSCH for the specified user will be transmitted on the defined radio link.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Modify* or *DL CCTrCH to Modify* IEs, then the Node B shall treat them each as follows:]

- [TDD – If the IE includes any of *TFCS* IE, *TFCI coding* IE or *Puncture Limit* IE the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]
- [TDD – If the IE includes any *UL DPCH to add* or *DL DPCH to add* IEs, the Node B shall include this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH to delete* or *DL DPCH to delete* IEs, the Node B shall remove this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH to modify* or *DL DPCH to modify* IEs, and includes any of *Repetition Period* IE, *Repetition Length* IE, or *TDD DPCH Offset* IE or the message includes *UL/DL Timeslot Information* and includes any of *Midamble shift and Burst Type* IE, *Time Slot* IE, or *TFCI presence* IE or the message includes *UL/DL Code* information and includes *TDD Channelisation Code* IE, the Node B shall apply these specified information elements as the new values, otherwise the old values specified for this DPCH configuration are still applicable.]

[TDD – UL/DL CCTrCH Addition]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Add* IE or *DL CCTrCH to Add* IE, the Node B shall include this CCTrCH in the new configuration.]

[TDD – If the *UL/DL CCTrCH to Add* IE includes any *UL/DL DPCH Information* IE, the Node B shall reserve necessary resources for the new configuration of the UL/DL DPCH(s) according to the parameters given in the message.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL CCTrCH to Add* IE, the Node B shall set the TPC step size of that CCTrCH to the same value as the lowest numbered DL CCTrCH in the current configuration.]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any UL or DL CCTrCH to be deleted, the Node B shall remove this CCTrCH in the new configuration.]

DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH to modify*, *DSCH to add* or *DSCH to delete* IEs, then the Node B shall use this information to add/modify/delete the indicated DSCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DSCH.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Information* IE then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received if one does not already exist or shall apply the new values if such a bearer does already exist. The *Binding ID* IE and *Transport Layer Address* IE of any new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message. If the RADIO LINK RECONFIGURATION PREPARE message specifies that

the TFCI2 transport bearer is to be deleted then the Node B shall release the resources associated with that bearer in the new configuration.

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI field but a TFCI2 transport bearer has not already been set up and *TFCI2 Bearer Information* IE is not included in the message then the Node B shall transmit the TFCI2 field with zero power in the new configuration.]

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information* IE is included in the message then the Node B shall transmit the TFCI2 field with zero power until Synchronisation is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer in the new configuration (see ref. [24]).]

[TDD – USCH Addition/Modification/Deletion:]

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]
- [TDD – The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each USCH.]

RL Information:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B may activate SSDT using the *SSDT Cell Identity* IE in the new configuration.]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the Node B shall deactivate SSDT in the new configuration.]
- [FDD – If the *RL Information* IE includes a *DL Code Information* IE containing a *DL Scrambling Code* IE, the Node B shall apply the values in the new configuration.]
- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- If the *RL Information* IE includes the *Maximum DL Power* and/or the *Minimum DL Power* IEs, the Node B shall apply the values in the new configuration. [FDD - During compressed mode, the $P_{SR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k .]
- [TDD – If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall apply the given power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu is achieved for the CCTrCH. If no *Initial DL Transmission power* IE is included with a new CCTrCH, the Node B shall use any transmission power level currently used on already existing CCTrCH's when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]

[TDD - PDSCH RL ID]

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *PDSCH RL ID* IE then in the new configuration the Node B shall use the PDSCH and/or PUSCH in this radio link.]

General

If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exist a Prepared Reconfiguration, as defined in subclause 3.1.

In the RADIO LINK RECONFIGURATION READY message, the Node B shall include the *RL Information Response* IE for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the Transport Layer Address and the Binding ID for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In case of a DCH requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* shall be included in the IE *DCH Information Response* IE.

In case of a set of coordinated DCHs requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the DCH in the set of coordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the Node B, the *RL Information Response* IE shall be included only for one of the combined RLs. The *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

***** UNAFFECTED TEXT *****

9.1.36 RADIO LINK SETUP REQUEST

***** UNAFFECTED TEXT *****

9.1.36.2 TDD message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCH Information		0 to <maxno CCH>			EACH	notify
>CCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
>UL DPCH Information		0..1			YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
DL CCH Information		0 to <maxno CCH>			EACH	notify
>CCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
>TDD TPC DL Step Size	M		9.2.3.21		–	
>TPC CCH List		0 to <maxno CCH>		List of uplink CCH which provide TPC	–	
>>TPC CCH ID	M		CCH ID 9.2.3.3		–	
>DL DPCH information		0..1			YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
DCH Information	O		DCH TDD Information 9.2.3.4C		YES	reject
DSCH Information	O		DSCH TDD Information 9.2.3.5A		YES	reject
USCH Information	O		9.2.3.28		YES	reject
RL Information		1			YES	reject
>RL ID	M		9.2.1.53		–	

>C-ID	M		9.2.1.9		–	
>Frame Offset	M		9.2.1.31		–	
>Special Burst Scheduling	M		9.2.3.18A		–	
>Initial DL transmission Power	M		DL Power 9.2.1.21	Initial power on DPCH	–	
>Maximum DL power	M		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL power	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>DL Time Slot ISCP Info	O		9.2.3.4F		–	
<u>PDSCH-RL-ID</u>	<u>O</u>		<u>RL ID</u> 9.2.1.53		<u>YES</u>	<u>ignore</u>

Range bound	Explanation
MaxnoCCTrCH	Number of CCTrCH for one UE.

***** UNAFFECTED TEXT *****

9.1.42 RADIO LINK RECONFIGURATION PREPARE

***** UNAFFECTED TEXT *****

9.1.42.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCH to Add		0..<maxno of CCHs>			GLOBAL	reject
>CCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
>UL DPCH Information		0..1			YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
UL CCH to Modify		0..<maxno of CCHs>			GLOBAL	reject
>CCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>TFCI Coding	O		9.2.3.22		–	
>Puncture Limit	O		9.2.1.50		–	
>UL DPCH to add		0..1			YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH to modify		0..1			YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD DPCH Offset	O		9.2.3.19A		–	
>>UL Timeslot Information		0 to <maxno of ULts>			–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift and Burst Type	O		9.2.3.7		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>UL Code Information		0 to <maxno OfDPC H>			–	

>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code	O		9.2.3.19		–	
>UL DPCH to delete		0.. <maxno of DPCHs >			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		–	
UL CCH to Delete		0.. <maxno of CCH Hs>			GLOBAL	reject
>CCH ID	M		9.2.3.3		–	
DL CCH to Add		0.. <maxno of CCH Hs>			GLOBAL	reject
>CCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>PunctureLimit	M		9.2.1.50		–	
>TPC CCH List		0 to <maxno CCH Hs>		List of uplink CCH which provide TPC	–	
>>TPC CCH ID	M		CCH ID 9.2.3.3		–	
>DL DPCH Information		0..1			YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
DL CCH to Modify		0.. <maxno of CCH Hs>			GLOBAL	reject
>CCH ID	M		9.2.3.3.		–	
>TFCS	O		9.2.1.58		–	
>TFCI Coding	O		9.2.3.22		–	
>PunctureLimit	O		9.2.1.50		–	
>TPC CCH List		0 to <maxno CCH Hs>		List of uplink CCH which provide TPC	–	
>>TPC CCH ID	M		CCH ID 9.2.3.3		–	
>DL DPCH to add		0..1			YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH to modify		0..1			YES	reject

>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD DPCH Offset	O		9.2.3.19A		–	
>>DL Timeslot Information		0 .. <maxno ofDLts>			–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift and Burst Type	O		9.2.3.7		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>DL Code Information		0 .. <maxno OfDPC H>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code	O		9.2.3.19		–	
>DL DPCH to delete		0.. <maxno of DPCHs >			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		–	
DL CCTrCH to Delete		0.. <maxno of CCTrC Hs>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
DCHs to Modify	O		DCHs TDD to Modify 9.2.3.4D		YES	reject
DCHs to Add	O		DCH TDD Information 9.2.3.4C		YES	reject
DCHs to Delete		0..<max noofDC Hs>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
DSCH Information to modify		0 .. <Maxno of DSCHs >			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
>CCTrCH ID	O		9.2.3.3	DL CCTrCH in which the DSCH is mapped	–	
>Transport Format Set	O		9.2.1.59		–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>Frame Handling Priority	O		9.2.1.30		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	
>Transport Bearer Request Indicator	M		9.2.1.62A		–	
DSCH Information to add	O		DSCH TDD		YES	reject

			Information 9.2.3.5A			
DSCH Information to delete		0 .. <Maxno of DSCHs >			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
USCH Information to modify		0 .. <Maxno of USCHs >			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
>Transport Format Set	O		9.2.1.59		–	
> Allocation/Retention Priority	O		9.2.1.1A		–	
>CCTrCH ID	O		9.2.3.2	UL CCTrCH in which the USCH is mapped	–	
>Transport Bearer Request Indicator	M		9.2.1.62A		–	
USCH Information to add	O		USCH Information 9.2.3.28		YES	reject
USCH Information to delete		0 .. <Maxno of USCHs >			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
RL Information		0..1			YES	reject
>RL ID	M		9.2.1.53		–	
>Maximum Downlink Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum Downlink Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>Initial DL transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore
<u>PDSCH-RL-ID</u>	<u>O</u>		<u>RL ID</u> 9.2.1.53		<u>YES</u>	<u>ignore</u>

Range Bound	Explanation
<i>MaxnoofDCHs</i>	Maximum number of DCHs for a UE.
<i>MaxnoofCCTrCHs</i>	Maximum number of CCTrCHs for a UE.
<i>Maxnoof DPCHs</i>	Maximum number of DPCHs in one CCTrCH.
<i>MaxnoofDSCHs</i>	Maximum number of DSCHs for one UE
<i>MaxnoofUSCHs</i>	Maximum number of USCHs for one UE
<i>MaxnoofDLts</i>	Maximum number of Downlink time slots per Radio Link
<i>MaxnoofULts</i>	Maximum number of Uplink time slots per Radio Link

***** UNAFFECTED TEXT *****

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for NBAP.
--
-- *****

NBAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    Active-Pattern-Sequence-Information,
    AddorDeleteIndicator,
    AICH-Power,
    AICH-TransmissionTiming,
    AllocationRetentionPriority,
    APPreambleSignature,
    APSubChannelNumber,
    AvailabilityStatus,
    BCCH-ModificationTime,
    BindingID,
    BlockingPriorityIndicator,
    SCTD-Indicator,
    Cause,
    CCTrCH-ID,
    CDSubChannelNumbers,
    CellParameterID,
    CFN,
    Channel-Assignment-Indication,
    ChipOffset,
    C-ID,
    Closedlooptimingadjustmentmode,
    CommonChannelsCapacityConsumptionLaw,
    Compressed-Mode-Deactivation-Flag,
    CommonMeasurementType,
    CommonMeasurementValue,
```

CommonMeasurementValueInformation,
CommonPhysicalChannelID,
Common-PhysicalChannel-Status-Information,
Common-TransportChannel-Status-Information,
CommonTransportChannelID,
CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue,
CriticalityDiagnostics,
CPCH-Allowed-Total-Rate,
CPCHScramblingCodeNumber,
CPCH-UL-DPCCCH-SlotFormat,
CRNC-CommunicationContextID,
DCH-FDD-Information,
DCH-InformationResponse,
DCH-ID,
FDD-DCHs-to-Modify,
TDD-DCHs-to-Modify,
DCH-TDD-Information,
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-or-Global-CapacityCredit,
DL-Power,
DLPowerAveragingWindowSize,
DL-ScramblingCode,
DL-TimeslotISCP,
DL-Timeslot-Information,
DL-TimeslotISCPInfo,
DL-TPC-Pattern01Count,
DPCH-ID,
DSCH-ID,
DSCH-FDD-Information,
DSCH-InformationResponse,
DSCH-TDD-Information,
End-Of-Audit-Sequence-Indicator,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FrameHandlingPriority,
FrameOffset,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,

IB-Type,
IndicationType,
InnerLoopDLPCStatus,
LimitedPowerIncrease,
Local-Cell-ID,
MaximumDL-PowerCapability,
MaximumTransmissionPower,
Max-Number-of-PCPCHes,
MaxNrOfUL-DPDCHs,
MaxPRACH-MidambleShifts,
MeasurementFilterCoefficient,
MeasurementID,
MidambleShiftAndBurstType,
MinimumDL-PowerCapability,
MinSpreadingFactor,
MinUL-ChannelisationCodeLength,
MultiplexingPosition,
NEOT,
NFmax,
N-INSYNC-IND,
N-OUTSYNC-IND,
NodeB-CommunicationContextID,
NStartMessage,
PagingIndicatorLength,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PCP-Length,
PDSCH-CodeMapping,
PDSCHSet-ID,
PDSCH-ID,
PICH-Mode,
PICH-Power,
PowerAdjustmentType,
PowerOffset,
PowerRaiseLimit,
PRACH-Midamble,
PreambleSignatures,
PreambleThreshold,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
SCH-TimeSlot,
PunctureLimit,
PUSCHSet-ID,
PUSCH-ID,
QE-Selector,
RACH-SlotFormat,
RACH-SubChannelNumbers,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
ResourceOperationalState,
RL-Set-ID,

RL-ID,
Received-total-wide-band-power-Value,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
ScramblingCodeNumber,
SecondaryCCPCH-SlotFormat,
Segment-Type,
S-FieldLength,
SFN,
ShutdownTimer,
SIB-Originator,
SpecialBurstScheduling,
SSDT-Cell-Identity,
SSDT-CellID-Length,
SSDT-Indication,
Start-Of-Audit-Sequence-Indicator,
STTD-Indicator,
SSDT-SupportIndicator,
SyncCase,
T-Cell,
T-RLFFAILURE,
TDD-ChannelisationCode,
TDD-DPCHOffset,
TDD-TPC-DownlinkStepSize,
TDD-PhysicalChannelOffset,
TFCI2-BearerInformationResponse,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TFCS,
TimeSlot,
TimeSlotDirection,
TimeSlotStatus,
TimingAdvanceApplied,
ToAWE,
ToAWS,
TransmissionDiversityApplied,
TransmitDiversityIndicator,
TransmissionGapPatternSequenceCodeInformation,
Transmission-Gap-Pattern-Sequence-Information,
TransportBearerRequestIndicator,
TransportFormatSet,
TransportLayerAddress,
TSTD-Indicator,
UARFCN,
USCH-Information,
USCH-InformationResponse,
UL-CapacityCredit,
UL-DPCCH-SlotFormat,
UL-SIR,
UL-FP-Mode,

```
UL-PhysCH-SF-Variation,
UL-ScramblingCode,
UL-Timeslot-Information,
UL-TimeSlot-ISCP-Info,
UL-TimeslotISCP-Value,
UL-TimeslotISCP-Value-IncrDecrThres,
USCH-ID
FROM NBAP-IEs

PrivateIE-Container{ },
ProtocolExtensionContainer{ },
ProtocolIE-Container{ },
ProtocolIE-Single-Container{ },
ProtocolIE-ContainerList{ },
NBAP-PRIVATE-IES,
NBAP-PROTOCOL-IES,
NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers

id-Active-Pattern-Sequence-Information,
id-AdjustmentRatio,
id-AICH-Information,
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-AP-AICH-Information,
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-BCH-Information,
id-BCCH-ModificationTime,
id-BlockingPriorityIndicator,
id-Cause,
id-CauseLevel-PSCH-ReconfFailureTDD,
id-CauseLevel-RL-AdditionFailureFDD,
id-CauseLevel-RL-AdditionFailureTDD,
id-CauseLevel-RL-ReconfFailure,
id-CauseLevel-RL-SetupFailureFDD,
id-CauseLevel-RL-SetupFailureTDD,
id-CCP-InformationItem-AuditRsp,
id-CCP-InformationList-AuditRsp,
id-CCP-InformationItem-ResourceStatusInd,
id-CCTrCH-InformationItem-RL-FailureInd,
id-CCTrCH-InformationItem-RL-RestoreInd,
id-CDCA-ICH-Information,
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-Cell-InformationItem-AuditRsp,
id-Cell-InformationItem-ResourceStatusInd,
id-Cell-InformationList-AuditRsp,
id-CellParameterID,
id-CFN,
id-CFNReportingIndicator,
id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
```

id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD,
id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID,
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-CPCH-Information,
id-CPCH-Parameters-CTCH-SetupRsp,
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,

id-DL-TPC-Pattern01Count,
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteList-RL-ReconfPrepFDD,
id-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-TDD-Information,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-End-Of-Audit-Sequence-Indicator,
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRqstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstTDD,
id-IndicationType-ResourceStatusInd,
id-InitDL-Power,
id-InnerLoopDLPCStatus,
id-Limited-power-increase-information-Cell-SetupRqstFDD,
id-Local-Cell-ID,
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp,
id-Local-Cell-InformationItem-ResourceStatusInd,
id-Local-Cell-InformationItem2-ResourceStatusInd,
id-Local-Cell-InformationList-AuditRsp,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MaximumTransmissionPower,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,
id-NodeB-CommunicationContextID,
id-P-CCPCH-Information,
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRqstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRqstTDD,
id-PCH-Parameters-CTCH-SetupRsp,
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstTDD,
id-PCH-Information,
id-PCPCH-Information,

id-PICH-ParametersItem-CTCH-ReconfRqstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PDSCH-RL-ID,
id-PDSCHSets-AddList-PSCH-ReconfRqst,
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRqstTDD,
id-PICH-ParametersItem-CTCH-SetupRqstTDD,
id-PowerAdjustmentType,
id-PRACH-Information,
id-PRACHConstant,
id-PRACH-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRqstFDD,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,
id-PrimarySCH-Information-Cell-SetupRqstFDD,
id-PrimaryScramblingCode,
id-SCH-Information-Cell-ReconfRqstTDD,
id-SCH-Information-Cell-SetupRqstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PUSCHConstant,
id-PUSCHSets-AddList-PSCH-ReconfRqst,
id-PUSCHSets-DeleteList-PSCH-ReconfRqst,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,
id-RACH-ParametersItem-CTCH-SetupRqstFDD,
id-RACH-ParameterItem-CTCH-SetupRqstTDD,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRqstFDD,
id-RL-informationItem-RL-DeletionRqst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
id-RL-InformationItem-RL-RestoreInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-informationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,

id-RL-InformationList-RL-ReconfRqstFDD,
id-RL-InformationList-RL-SetupRqstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-ReconfRqstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-S-CCPCH-Information,
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-SecondarySCH-Information-Cell-ReconfRqstFDD,
id-SecondarySCH-Information-Cell-SetupRqstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH,
id-T-Cell,
id-TFCI2-Bearer-Information-RL-SetupRqstFDD,
id-TFCI2-BearerInformationResponse,
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-TimeslotISCPInfo,

id-TimingAdvanceApplied,
id-TransmissionDiversityApplied,
id-UARFCNforNt,
id-UARFCNforNd,
id-UARFCNforNu,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-UL-DPCH-InformationList-RL-SetupRqstTDD,
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,
id-USCH-Information-Add,
id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
id-USCH-InformationResponse,
id-USCH-Information,

maxNrOfCCTrCHs,
maxNrOfCodes,
maxNrOfCPCHs,
maxNrOfDCHs,
maxNrOfDLTSs,
maxNrOfDPCHs,
maxNrOfDSCHs,
maxNrOfFACHs,
maxNrOfRLs,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfRLSets,
maxNrOfPCPCHs,
maxNrOfPDSCHs,
maxNrOfPUSCHs,
maxNrOfPDSCHSets,
maxNrOfPUSCHSets,

```

maxNrOfSCCPCHs,
maxNrOfULTSs,
maxNrOfUSCHs,
maxAPSigNum,
maxCPCHCell,
maxFACHCell,
maxNoofLen,
maxRACHCell,
maxPCPCHCell,
maxPRACHCell,
maxSCCPCHCell,
maxSCPICHCell,
maxCellinNodeB,
maxCCPinNodeB,
maxCommunicationContext,
maxLocalCellinNodeB,
maxNrOfSlotFormatsPRACH,
maxIB,
maxIBSEG

```

```
FROM NBAP-Constants;
```

UNCHANGED TEXT IS REMOVED

9.3.3 PDU Definitions

```

-- *****
--
-- RADIO LINK SETUP REQUEST TDD
--
-- *****

```

```

RadioLinkSetupRequestTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkSetupRequestTDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}} OPTIONAL,
  ...
}

```

```

RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CRNC-CommunicationContextID          CRITICALITY reject          TYPE CRNC-CommunicationContextID
  PRESENCE mandatory }|
  { ID      id-UL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify          TYPE UL-CCTrCH-InformationList-RL-SetupRqstTDD
  PRESENCE optional }|
  { ID      id-DL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify          TYPE DL-CCTrCH-InformationList-RL-SetupRqstTDD
  PRESENCE optional }|
  { ID      id-DCH-TDD-Information                    CRITICALITY reject          TYPE DCH-TDD-Information      PRESENCE optional }|
  { ID      id-DSCH-TDD-Information                    CRITICALITY reject          TYPE DSCH-TDD-Information      PRESENCE optional }|
  { ID      id-USCH-Information                        CRITICALITY reject          TYPE USCH-Information          PRESENCE optional }|
  { ID      id-RL-Information-RL-SetupRqstTDD          CRITICALITY reject          TYPE RL-Information-RL-SetupRqstTDD
  PRESENCE mandatory },

```

```

}
...
}
RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-PDSCH-RL-ID          CRITICALITY ignore          EXTENSION RL-ID          PRESENCE optional },
  ...
}
UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
  ProtocolIE-Single-Container{{ UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}
UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID      id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD          CRITICALITY      notify          TYPE UL-CCTrCH-InformationItem-RL-SetupRqstTDD
  PRESENCE      mandatory}
}
UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  tFCS              TFCS,
  tFCI-Coding       TFCI-Coding,
  punctureLimit     PunctureLimit,
  uL-DPCH-Information  UL-DPCH-Information-RL-SetupRqstTDD          OPTIONAL,
  iE-Extensions     ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }          OPTIONAL,
  ...
}
UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
UL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-InformationIE-RL-SetupRqstTDD }}
UL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationList-RL-SetupRqstTDD          CRITICALITY notify          TYPE UL-DPCH-InformationItem-RL-SetupRqstTDD          PRESENCE mandatory }
}
UL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  uL-Timeslot-Information  UL-Timeslot-Information,
  iE-Extensions         ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }          OPTIONAL,
  ...
}
UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container{{ DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}
DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {

```

```

    { ID id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD          CRITICALITY   notify      TYPE DL-CCTrCH-InformationItem-RL-SetupRqstTDD
      PRESENCE mandatory}
  }

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCCTrCH-ID          CCTrCH-ID,
  tFCS                TFCS,
  tFCI-Coding        TFCI-Coding,
  punctureLimit      PunctureLimit,
  tdd-TPC-DownlinkStepSize TDD-TPC-DownlinkStepSize,
  cCCTrCH-TPCList    CCTrCH-TPCList-RL-SetupRqstTDD          OPTIONAL,
  dL-DPCH-Information DL-DPCH-Information-RL-SetupRqstTDD    OPTIONAL,
  iE-Extensions      ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD

CCTrCH-TPCItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCCTrCH-ID          CCTrCH-ID,
  iE-Extensions      ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationList-RL-SetupRqstTDD          CRITICALITY   notify      TYPE DL-DPCH-InformationItem-RL-SetupRqstTDD          PRESENCE mandatory }
}

DL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod    RepetitionPeriod,
  repetitionLength    RepetitionLength,
  tdd-DPCHOffset      TDD-DPCHOffset,
  dL-Timeslot-Information DL-Timeslot-Information,
  iE-Extensions      ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
  rL-ID              RL-ID,

```

```

c-ID                               C-ID,
frameOffset                         FrameOffset,
specialBurstScheduling              SpecialBurstScheduling,
initialDL-transmissionPower         DL-Power,
maximumDL-power                    DL-Power,
minimumDL-power                    DL-Power,
dL-TimeSlotISCPInfo                DL-TimeSlotISCPInfo OPTIONAL,
iE-Extensions                       ProtocolExtensionContainer { { RL-Information-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
...
}

```

```

RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE TDD
--
-- *****

```

```

RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{RadioLinkReconfigurationPrepareTDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer  {{RadioLinkReconfigurationPrepareTDD-Extensions}} OPTIONAL,
  ...
}

```

```

RadioLinkReconfigurationPrepareTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-NodeB-CommunicationContextID          CRITICALITY    reject          TYPE NodeB-CommunicationContextID
  PRESENCE  mandatory } |
  { ID      id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
  PRESENCE  optional } |
  { ID      id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE UL-CCTrCH-InformationModifyList-RL-
ReconfPrepTDD          PRESENCE  optional } |
  { ID      id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE UL-CCTrCH-InformationDeleteList-RL-
ReconfPrepTDD          PRESENCE  optional } |
  { ID      id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
  PRESENCE  optional } |
  { ID      id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE DL-CCTrCH-InformationModifyList-RL-
ReconfPrepTDD          PRESENCE  optional } |
  { ID      id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE DL-CCTrCH-InformationDeleteList-RL-
ReconfPrepTDD          PRESENCE  optional } |
  { ID      id-TDD-DCHs-to-Modify          CRITICALITY    reject          TYPE TDD-DCHs-to-Modify          PRESENCE optional
  } |
  { ID      id-DCHs-to-Add-TDD          CRITICALITY    reject          TYPE DCH-TDD-Information          PRESENCE optional
  } |
  { ID      id-DCH-DeleteList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE DCH-DeleteList-RL-ReconfPrepTDD
  PRESENCE  optional } |
}

```

```

{ ID id-DSCH-Information-ModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE DSCH-Information-ModifyList-RL-ReconfPrepTDD
  PRESENCE optional } |
{ ID id-DSCHs-to-Add-TDD CRITICALITY reject TYPE DSCH-TDD-Information PRESENCE optional } |
{ ID id-DSCH-Information-DeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE DSCH-Information-DeleteList-RL-ReconfPrepTDD
  PRESENCE optional } |
{ ID id-USCH-Information-ModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE USCH-Information-ModifyList-RL-ReconfPrepTDD
  PRESENCE optional } |
{ ID id-USCH-Information-Add CRITICALITY reject TYPE USCH-Information PRESENCE optional } |
{ ID id-USCH-Information-DeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE USCH-Information-DeleteList-RL-ReconfPrepTDD
  PRESENCE optional } |
{ ID id-RL-Information-RL-ReconfPrepTDD CRITICALITY reject TYPE RL-Information-RL-ReconfPrepTDD
  PRESENCE optional },
...
}

RadioLinkReconfigurationPrepareTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-PDSCH-RL-ID CRITICALITY ignore EXTENSION RL-ID PRESENCE optional },
  ...
}

UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID CCTrCH-ID,
  tFCS TFCS,
  tFCI-Coding TFCI-Coding,
  punctureLimit PunctureLimit,
  ul-DPCH-InformationList UL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
  ...
}

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationAddItem-RL-ReconfPrepTDD PRESENCE
  mandatory }
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-DPCHOffset TDD-DPCHOffset,
  uL-Timeslot-Information UL-Timeslot-Information,
  iE-Extensions ProtocolExtensionContainer { { UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
  ...
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```



```

}
...
}
UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS                TFCS                                OPTIONAL,
    tFCI-Coding        TFCI-Coding                        OPTIONAL,
    punctureLimit      PunctureLimit                    OPTIONAL,
    ul-DPCH-InformationAddList  UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD  OPTIONAL,
    ul-DPCH-InformationModifyList  UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
    ul-DPCH-InformationDeleteList  UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD  OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
    PRESENCE mandatory }
}

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    uL-Timeslot-Information  UL-Timeslot-Information,
    iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE UL-DPCH-InformationModify-ModifyItem-RL-
    ReconfPrepTDD          PRESENCE mandatory }
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod  OPTIONAL,
    repetitionLength      RepetitionLength  OPTIONAL,

```

```

    tdd-DPCHOffset                TDD-DPCHOffset        OPTIONAL,
    uL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD  UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType  MidambleShiftAndBurstType        OPTIONAL,
    tFCI-Presence            TFCI-Presence        OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD  UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode        OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD  NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE UL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {

```

```

    dPCH-ID                DPCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID                CCTrCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID                CCTrCH-ID,
    tFCS                      TFCS,
    tFCI-Coding              TFCI-Coding,
    punctureLimit            PunctureLimit,
    cCCTrCH-TPCList          CCTrCH-TPCAddList-RL-ReconfPrepTDD          OPTIONAL,
    dl-DPCH-InformationList  DL-DPCH-InformationAddList-RL-ReconfPrepTDD  OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD

CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID                CCTrCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs} }          OPTIONAL,
    ...
}

CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD  CRITICALITY reject      TYPE DL-DPCH-InformationAddItem-RL-ReconfPrepTDD  PRESENCE
mandatory }
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  dl-Timeslot-Information DL-Timeslot-Information,
  iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }  OPTIONAL,
  ...
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID              CCTrCH-ID,
  tFCS                   TFCS                                OPTIONAL,
  tFCI-Coding            TFCI-Coding                        OPTIONAL,
  punctureLimit          PunctureLimit                      OPTIONAL,
  cCTrCH-TPCList         CCTrCH-TPCModifyList-RL-ReconfPrepTDD  OPTIONAL,
  dl-DPCH-InformationAddList DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD  OPTIONAL,
  dl-DPCH-InformationModifyList DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
  dl-DPCH-InformationDeleteList DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD  OPTIONAL,
  iE-Extensions         ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs} }  OPTIONAL,
  OPTIONAL,
  ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID              CCTrCH-ID,
  iE-Extensions         ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs} }  OPTIONAL,
  ...
}

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}

```

```

DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
  PRESENCE mandatory }
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength         RepetitionLength,
  tdd-DPCHOffset          TDD-DPCHOffset,
  dL-Timeslot-Information  DL-Timeslot-Information,
  iE-Extensions           ProtocolExtensionContainer { { DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod          OPTIONAL,
  repetitionLength         RepetitionLength          OPTIONAL,
  tdd-DPCHOffset          TDD-DPCHOffset          OPTIONAL,
  dL-Timeslot-InformationAddModify-ModifyList-RL-ReconfPrepTDD  DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
  iE-Extensions           ProtocolExtensionContainer { { DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  timeSlot          TimeSlot,
  midambleShiftAndBurstType  MidambleShiftAndBurstType  OPTIONAL,
  tFCI-Presence      TFCI-Presence  OPTIONAL,
  dL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD  DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
  iE-Extensions     ProtocolExtensionContainer { { DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

```

```

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dPCH-ID DPCH-ID,
  tdd-ChannelisationCode TDD-ChannelisationCode OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD } }

DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-DeleteListIE-RL-
  ReconfPrepTDD PRESENCE mandatory }
}

DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dPCH-ID DPCH-ID,
  iE-Extensions ProtocolExtensionContainer { { DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID CCTrCH-ID,
  iE-Extensions ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD

```

```

DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    iE-Extensions         ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-ModifyItem-RL-ReconfPrepTDD

DSCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    cCTrCH-ID              CCTrCH-ID                OPTIONAL,
    transportFormatSet     TransportFormatSet        OPTIONAL,
    allocationRetentionPriority  AllocationRetentionPriority  OPTIONAL,
    frameHandlingPriority   FrameHandlingPriority   OPTIONAL,
    toAWS                  ToAWS                OPTIONAL,
    toAWE                  ToAWE                OPTIONAL,
    transportBearerRequestIndicator  TransportBearerRequestIndicator,
    iE-Extensions         ProtocolExtensionContainer { { DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
    ...
}

DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-DeleteItem-RL-ReconfPrepTDD

DSCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    iE-Extensions         ProtocolExtensionContainer { { DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
    ...
}

DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-ModifyItem-RL-ReconfPrepTDD

USCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    transportFormatSet     TransportFormatSet        OPTIONAL,
    allocationRetentionPriority  AllocationRetentionPriority  OPTIONAL,
    cCTrCH-ID              CCTrCH-ID                OPTIONAL,
    transportBearerRequestIndicator  TransportBearerRequestIndicator,
    iE-Extensions         ProtocolExtensionContainer { { USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
    ...
}

```

```

USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-DeleteItem-RL-ReconfPrepTDD

USCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-ReconfPrepTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    maxDL-Power          DL-Power OPTIONAL,
    minDL-Power          DL-Power OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { RL-Information-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-InitDL-Power    CRITICALITY ignore    EXTENSION DL-Power    PRESENCE optional },
    ...
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- IEs
--
-- *****

```

```

id-AICH-Information                ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd  ProtocolIE-ID ::= 1
id-BCH-Information                ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd  ProtocolIE-ID ::= 8
id-BCCH-ModificationTime          ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator       ProtocolIE-ID ::= 10
id-Cause                          ProtocolIE-ID ::= 13
id-CCP-InformationItem-AuditRsp    ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp    ProtocolIE-ID ::= 15
id-CCP-InformationItem-ResourceStatusInd  ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp    ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd  ProtocolIE-ID ::= 18

```


id-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 19
id-CellParameterID	ProtocolIE-ID ::= 23
id-CFN	ProtocolIE-ID ::= 24
id-C-ID	ProtocolIE-ID ::= 25
id-CommonMeasurementObjectType-CM-Rprt	ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst	ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp	ProtocolIE-ID ::= 33
id-CommonMeasurementType	ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID	ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 37
id-CommunicationControlPortID	ProtocolIE-ID ::= 40
id-ConfigurationGenerationID	ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID	ProtocolIE-ID ::= 44
id-CriticalityDiagnostics	ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD	ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD	ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 54
id-DCH-DeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 55
id-DCH-FDD-Information	ProtocolIE-ID ::= 56
id-DCH-TDD-Information	ProtocolIE-ID ::= 57
id-DCH-InformationResponse	ProtocolIE-ID ::= 59
id-FDD-DCHs-to-Modify	ProtocolIE-ID ::= 62
id-TDD-DCHs-to-Modify	ProtocolIE-ID ::= 63
id-DCH-ModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 65
id-DedicatedMeasurementObjectType-DM-Rprt	ProtocolIE-ID ::= 67
id-DedicatedMeasurementObjectType-DM-Rqst	ProtocolIE-ID ::= 68
id-DedicatedMeasurementObjectType-DM-Rsp	ProtocolIE-ID ::= 69
id-DedicatedMeasurementType	ProtocolIE-ID ::= 70
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 72
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 73
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 76
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 79
id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 83
id-DL-ReferencePowerInformationItem-DL-PC-Rqst	ProtocolIE-ID ::= 84
id-DLReferencePower	ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 86
id-DSCH-AddItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 87
id-DSCHs-to-Add-FDD	ProtocolIE-ID ::= 89
id-DSCH-DeleteItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 91
id-DSCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 100
id-DSCH-InformationResponse	ProtocolIE-ID ::= 105
id-DSCH-FDD-Information	ProtocolIE-ID ::= 106
id-DSCH-TDD-Information	ProtocolIE-ID ::= 107

id-DSCH-ModifyItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 108
id-DSCH-ModifyList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 112
id-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 113
id-FACH-Information	ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd	ProtocolIE-ID ::= 123
id-Local-Cell-ID	ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 128
id-AdjustmentPeriod	ProtocolIE-ID ::= 129
id-MaxAdjustmentStep	ProtocolIE-ID ::= 130
id-MaximumTransmissionPower	ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 132
id-MeasurementID	ProtocolIE-ID ::= 133
id-MessageStructure	ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst	ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID	ProtocolIE-ID ::= 143
id-P-CCPCH-Information	ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 145
id-P-CPICH-Information	ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 147
id-P-SCH-Information	ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 156
id-PCH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 157
id-PCH-Information	ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 165
id-PICH-Information	ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 168
id-PowerAdjustmentType	ProtocolIE-ID ::= 169
id-PRACH-Information	ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 176
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181

id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 189
id-RACH-Information	ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 197
id-ReportCharacteristics	ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD	ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRqst	ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRqstFDD	ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRqstFDD	ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRqst	ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 214
id-RL-InformationList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 215
id-RL-InformationList-RL-SetupRqstFDD	ProtocolIE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady	ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-ReconfRsp	ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 221
id-RL-InformationResponseList-RL-ReconfReady	ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-ReconfRsp	ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 225
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 228
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 229
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure	ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 241
id-RL-Set-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 242
id-S-CCPCH-Information	ProtocolIE-ID ::= 247
id-S-CPICH-Information	ProtocolIE-ID ::= 249
id-SCH-Information	ProtocolIE-ID ::= 251
id-S-SCH-Information	ProtocolIE-ID ::= 253

id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD	ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD	ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 264
id-SecondarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate	ProtocolIE-ID ::= 266
id-SFN	ProtocolIE-ID ::= 268
id-ShutdownTimer	ProtocolIE-ID ::= 269
id-Start-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 114
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 270
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 271
id-SyncCase	ProtocolIE-ID ::= 274
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH	ProtocolIE-ID ::= 275
id-T-Cell	ProtocolIE-ID ::= 276
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 277
id-TimeSlotConfigurationList-Cell-SetupRqstTDD	ProtocolIE-ID ::= 278
id-TransmissionDiversityApplied	ProtocolIE-ID ::= 279
id-TypeOfError	ProtocolIE-ID ::= 508
id-UARFCNforNt	ProtocolIE-ID ::= 280
id-UARFCNforNd	ProtocolIE-ID ::= 281
id-UARFCNforNu	ProtocolIE-ID ::= 282
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 284
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 285
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 288
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 289
id-UL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 291
id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 293
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 294
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 295
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 296
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 297
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD	ProtocolIE-ID ::= 300
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD	ProtocolIE-ID ::= 301
id-USCH-Information-Add	ProtocolIE-ID ::= 302
id-USCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 304
id-USCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 306
id-USCH-InformationResponse	ProtocolIE-ID ::= 309
id-USCH-Information	ProtocolIE-ID ::= 310
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 315
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 316
id-AdjustmentRatio	ProtocolIE-ID ::= 317
id-AP-AICH-Information	ProtocolIE-ID ::= 320
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 323
id-CauseLevel-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 324
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 328

id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 329
id-CDCA-ICH-Information	ProtocolIE-ID ::= 330
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode	ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag	ProtocolIE-ID ::= 335
id-CPCH-Information	ProtocolIE-ID ::= 336
id-CPCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 342
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count	ProtocolIE-ID ::= 358
id-DPCHConstant	ProtocolIE-ID ::= 359
id-FACH-ParametersList-CTCH-SetupRsp	ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 375
id-PCPCH-Information	ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 380
id-PRACHConstant	ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 383
id-PUSCHConstant	ProtocolIE-ID ::= 384
id-RACH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 385
id-Synchronisation-Configuration-Cell-ReconfRqst	ProtocolIE-ID ::= 393
id-Synchronisation-Configuration-Cell-SetupRqst	ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 398
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 403
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 407
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 408
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 409
id-CommunicationContextInfoItem-Reset	ProtocolIE-ID ::= 412
id-CommunicationControlPortInfoItem-Reset	ProtocolIE-ID ::= 414
id-ResetIndicator	ProtocolIE-ID ::= 416
id-TFCI2-Bearer-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 417
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD	ProtocolIE-ID ::= 418

id-TFCI2-BearerInformationResponse	ProtocolIE-ID ::= 419
id-TimingAdvanceApplied	ProtocolIE-ID ::= 287
id-CFNReportingIndicator	ProtocolIE-ID ::= 6
id-SFNReportingIndicator	ProtocolIE-ID ::= 11
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 12
id-TimeslotISCPInfo	ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 47
id-InitDL-Power	ProtocolIE-ID ::= 509
id-PDSCH-RL-ID	ProtocolIE-ID ::= 66

END

CHANGE REQUEST

⌘ **25.433 CR 647** ⌘ rev **-** ⌘ Current version: **4.4.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Use of PDSCH RL ID for TDD DSCH/USCH		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May 2002
Category:	⌘ F	Release:	⌘ REL-4
	<i>Use <u>one</u> of the following categories:</i> F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.		<i>Use <u>one</u> of the following releases:</i> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change:	⌘ DSCH RNTI is a new identifier used in FDD with PDSCH RL ID for DSCH MAC-c/sh multiplexing. CRs for DSCH RNTI were approved at last RAN meeting. Although TDD does not have this particular MAC problem, it does have a similar problem in that the RRC signalling used on the SHCCH to allocate DSCH and USCH needs this same unique identity and thus needs to use PDSCH RL ID. It is therefore proposed to use PDSCH RL ID for TDD DSCH/USCH signalling where needed. PDSCH RL ID which is used in RL SETUP REQUEST and RADIO LINK RECONFIGURATION PREPARE FDD messages is now also added to TDD messages. This proposal aligns TDD to the already approved changes in 25.331.
Summary of change:	⌘ New procedure sections are added in 8.2.17.2 and 8.3.2.2 to indicate TDD use of PDSCH RL ID. Section 9.1.36.2: tabular modification to RADIO LINK SETUP REQUEST. Section 9.1.42.2: tabular modification to RADIO LINK RECONFIGURATION PREPARE. ASN.1 is added.
Consequences if not approved:	⌘ The same problem that was identified and fixed in FDD will not be fixed in TDD. In addition the use of PDSCH RL ID would be misaligned between WG2 and WG3 and the use of PDSCH RL ID would be misaligned between FDD and TDD for this specification. Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release) because it affects implementations supporting the corrected functionality,

i.e. TDD DSCH/USCH setup and establishment.

Clauses affected:	⌘	8.2.17.2, 8.3.2.2, 9.1.36.2, 9.1.42.2, 9.3.2, 9.3.4, 9.3.6		
Other specs	⌘	<input checked="" type="checkbox"/> Other core specifications	⌘	TS 25.433 v3.9.0 CR646 TS 25.433 v5.0.0 CR648
affected:		<input type="checkbox"/> Test specifications		
		<input type="checkbox"/> O&M Specifications		
Other comments:	⌘			

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.2.17 Radio Link Setup

8.2.17.1 General

This procedure is used for establishing the necessary resources for a new Node B Communication Context in the Node B.

[FDD – The RL Setup procedure is used to establish one or more radio links. The procedure establishes one or more DCHs on all radio links, and in addition, it can include the establishment of one or more DSCHs on one radio link.]

[TDD – The RL Setup procedure is used for establish one radio link including one or more transport channels. The transport channels can be a mixture of DCHs, DSCHs, and USCHs, including also combinations where one or more transport channel types are not present.]

8.2.17.2 Successful Operation

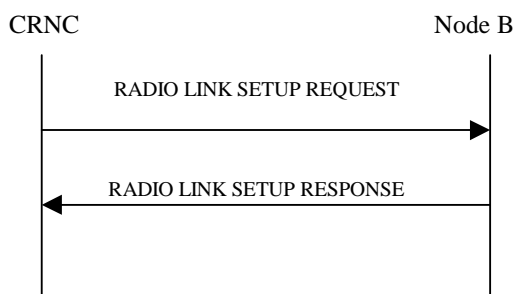


Figure 24: Radio Link Setup procedure, Successful Operation

The procedure is initiated with a RADIO LINK SETUP REQUEST message sent from the CRNC to Node B.

Upon reception of RADIO LINK SETUP REQUEST message, the Node B shall reserve necessary resources and configure the new Radio Link(s) according to the parameters given in the message.

The Node B shall prioritise resource allocation for the RL(s) to be established according to Annex A.

Transport Channels Handling:

DCH(s):

[TDD – If the *DCH Information* IE is present, the Node B shall configure the new DCH(s) according to the parameters given in the message.]

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs then, the Node B shall treat the DCHs in the *DCH Information* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.

[FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]

For a set of co-ordinated DCHs the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD - If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected" the Physical channel BER shall be used for the QE, ref. [16]].

The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The received *Frame Handling Priority* IE specified for each Transport Channel should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new RL(s) has been activated.

[FDD – The *Diversity Control Field* IE indicates for each RL (except the first RL in the message) whether the Node B shall combine the concerned RL or not. If the *Diversity Control Field* IE is set to "May", then Node B shall decide for either of the alternatives. If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL. Diversity combining is applied to Dedicated Transport Channels (DCH), i.e. it is not applied to the DSCHs. When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with. If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.]

[FDD – In the RADIO LINK SETUP RESPONSE message the Node B shall indicate with the *Diversity Indication* IE whether the RL is combined or not. In case of combining, only the *Reference RL ID* IE shall be included to indicate one of the existing RLs that the concerned RL is combined with. In case of not combining the Node B shall include in the RL SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]

[TDD – The Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]

In case of coordinated DCH, the *Binding ID* IE and the *Transport Layer Address* IE shall be specified for only one of the coordinated DCHs.

DSCH(s):

If the *DSCH Information* IE is present, the Node B shall configure the new DSCH(s) according to the parameters given in the message.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *TFCI2 Bearer Information* IE then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received. The Node B shall manage the time of arrival of these frames according to the values of ToAWS and ToAWE specified in the IE's. The *Binding ID* IE and *Transport Layer Address* IE for the new bearer to be set up for this purpose shall be returned in the RADIO LINK SETUP RESPONSE message.]

The Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DSCH of this RL.

[TDD – USCH(s)]:

[TDD – If the *USCH Information* IE is present, the Node B shall configure the new USCH(s) according to the parameters given in the message.]

[TDD – In case the *USCH Information* IE is present, the Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each USCH of this RL.]

Physical Channels Handling:

[FDD – Compressed Mode]:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the information about the Transmission Gap Pattern Sequences to be used in the Compressed Mode Configuration. This Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[FDD – If the *Downlink compressed mode method* IE in one or more Transmission Gap Pattern Sequence is set to 'SF/2' in the RADIO LINK SETUP REQUEST message, the Node B shall use or not the alternate scrambling code as indicated for each DL Channelisation Code in the *Transmission Gap Pattern Sequence Code Information* IE.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE and the *Active Pattern Sequence Information* IE, the Node B shall use the information to activate the indicated Transmission Gap Pattern Sequence(s) in the new RL. The received *CM Configuration Change CFN* refers to the latest passed CFN with that value. The Node B shall treat the received *TGCFN* IEs as follows:]

- [FDD - If any received *TGCFN* IE has the same value as the received *CM Configuration Change CFN* IE, the Node B shall consider the concerning Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD - If any received *TGCFN* IE does not have the same value as the received *CM Configuration Change CFN* IE but the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN* IE has already passed, the Node B shall consider the concerning Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD - For all other Transmission Gap Pattern Sequences included in the *Active Pattern Sequence Information* IE, the Node B shall activate each Transmission Gap Pattern Sequence at the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN* IE for the Transmission Gap Pattern Sequence.]

[FDD – DL Code Information]:

[FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]

[TDD – PDSCH RL ID]:

[TDD – If the *PDSCH RL ID* IE is included in RADIO LINK SETUP REQUEST message, the Node B shall use the PDSCH RL ID as an identifier for the PDSCH and/or PUSCH in this radio link.]

General:

[FDD – If the *Propagation Delay* IE is included, the Node B may use this information to speed up the detection of L1 synchronisation.]

[FDD – The *UL SIR Target* IE included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control.]

[1.28Mcps TDD – The *UL SIR Target* IE included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control according [19] and [21].]

[FDD – If the received *Limited Power Increase* IE is set to 'Used', the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control.]

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP message indicates that there shall be a hard split on the TFCI field but the *TFCI2 Bearer Information* IE is not included in the message then the Node B shall transmit the TFCI2 field with zero power.]

[FDD - If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information* IE is included in the message then the Node B shall

transmit the TFCI2 field with zero power until Synchronization is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer (see ref.[24]).]

Radio Link Handling:

[FDD – Transmit Diversity]:

[FDD – When *Diversity Mode* IE is "STTD", "Closedloop mode1", or "Closedloop mode2", the Node B shall activate/deactivate the Transmit Diversity to each Radio Link in accordance with *Transmit Diversity Indication* IE]

DL Power Control:

[FDD – The Node B shall start the DL transmission using the initial DL power specified in the message on each DL DPCH of the RL until either UL synchronisation on the Uu is achieved for the RLS or Power Balancing is activated. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) and the power control procedure (see subclause 8.3.7), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message. During compressed mode, the $P_{SIR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]

[FDD - If the *DPC Mode* IE is present in the RADIO LINK SETUP REQUEST message, the Node B shall apply the DPC mode indicated in the message, and be prepared that the DPC mode may be changed during the life time of the RL. If the *DPC Mode* IE is not present in the RADIO LINK SETUP REQUEST message, DPC mode 0 shall be applied (see ref. [10]).]

[TDD – The Node B shall start the DL transmission using the initial DL power specified in the message on each DL DPCH and on each Time Slot of the RL until the UL synchronisation on the Uu is achieved for the RL. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3), but shall always be kept within the maximum and minimum limit specified in the RL SETUP REQUEST message.]

[TDD – If the [3.84Mcps TDD - *DL Time Slot ISCPInfo* IE] or [1.28Mcps TDD - *DL Timeslot ISCP LCR* IE] is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged].

[FDD – If the received *Inner Loop DL PC Status* IE is set to "Active", the Node B shall activate the inner loop DL power control for all RLs. If *Inner Loop DL PC Status* IE is set to "Inactive", the Node B shall deactivate the inner loop DL power control for all RLs according to ref. [10]]

General:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE and the *S-Field Length* IE, the Node B shall activate SSDT, if supported, using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

[FDD – Irrespective of SSDT activation, the Node B shall include in the RADIO LINK SETUP RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK SETUP REQUEST message requested SSDT activation and the RADIO LINK SETUP RESPONSE message indicates that the SSDT capability is supported for this RL, SSDT is activated in the Node B.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity for EDSCHPC* IE, the Node B shall activate enhanced DSCH power control, if supported, using the *SSDT Cell Identity for EDSCHPC* IE and *SSDT Cell Identity Length* IE as well as *Enhanced DSCH PC* IE in accordance with ref. [10] subclause 5.2.2. If the RADIO LINK SETUP REQUEST message includes both *SSDT Cell Identity* IE and *SSDT Cell Identity for EDSCHPC* IE, then the Node B shall ignore the value in *SSDT Cell Identity for EDSCHPC* IE]

[FDD – Radio Link Set Handling]:

[FDD – The *First RLS Indicator* IE indicates if the concerning RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the Node B together with the value of the *DL TPC pattern 01 count* IE which the Node B has received in the Cell Setup procedure, to determine the initial TPC pattern in the DL of the concerning RL and all RLs which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication context.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication context.]

[FDD – The UL out-of-sync algorithm defined in [10] shall for each of the established RL Set(s) use the maximum value of the parameters N_OUTSYNC_IND and T_RLFAILURE, and the minimum value of the parameters N_INSYNC_IND, that are configured in the cells supporting the radio links of the RL Set]

***** UNAFFECTED TEXT *****

8.3.2 Synchronised Radio Link Reconfiguration Preparation

8.3.2.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one UE-UTRAN connection within a Node B.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.2.2 Successful Operation

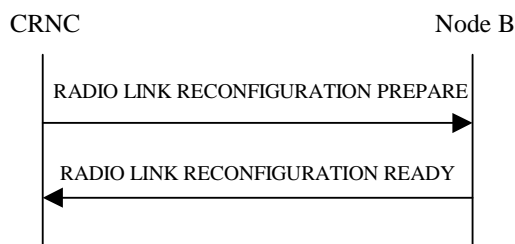


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the CRNC by sending the message RADIO LINK RECONFIGURATION PREPARE to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Modify* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the UL of a DCH, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the DL of a DCH, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes multiple *DCH Specific Info* IEs then the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs to Modify* IE includes the *UL FP Mode* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Add* IE includes multiple *DCH specific Info* IEs then, the Node B shall treat the DCHs in the *DCHs to Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD – If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected" the Physical channel BER shall be used for the QE, ref. [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Delete* IEs, the Node B shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of coordinated DCHs are requested to be deleted, the Node B shall not include this set of coordinated DCHs in the new configuration.

Physical Channel Modification:

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *UL DPCH Information* IE then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPDCHs* IE (if it is included) in the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]
- [FDD – If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD – The Node B shall use the *TFCS* IE for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL DPCCH Slot Format* IE, the Node B shall set the new Uplink DPCCH Structure to the new configuration.]
- [FDD - If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the Node B shall apply diversity according to the given value.]
- [FDD – If the *UL DPCH Information* IE includes an *SSDT Cell Identity Length* IE and/or an *S-Field Length* IE, the Node B shall apply the values in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information* IE then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – The Node B shall use the *TFCS* IE for the DL (if it is present) when reserving resources for the downlink of the new configuration. The Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE or the *TFCI Presence* IE, the Node B shall use the information when building TFCIs in the new configuration.]

- [FDD – If the *DL DPCH Information* IE includes the *DL DPCCCH Slot Format* IE, group the Node B shall set the new Downlink DPCCCH Structure to the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the Node B shall apply the indicated multiplexing type in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to 'Used', the Node B shall, if supported, use Limited Power Increase ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to 'Not Used', the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH code mapping* IE then the Node B shall apply the defined mapping between TFCI values and PDSCH channelisation codes.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH RL ID* IE then the Node B shall infer that the PDSCH for the specified user will be transmitted on the defined radio link.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Modify* or *DL CCTrCH to Modify* IEs, then the Node B shall treat them each as follows:]

- [TDD – If the IE includes any of *TFCS* IE, *TFCI coding* IE or *Puncture Limit* IE the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]
- [TDD – If the IE includes any *UL DPCH to add* or *DL DPCH to add* IEs, the Node B shall include this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH to delete* or *DL DPCH to delete* IEs, the Node B shall remove this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH to modify* or *DL DPCH to modify* IEs, and includes any of *Repetition Period* IE, *Repetition Length* IE, or *TDD DPCH Offset* IE or the message includes UL/DL Timeslot Information and includes any of [*3.84Mcps TDD - Midamble shift and Burst Type* IE, *Time Slot* IE], [*1.28Mcps TDD - Midamble shift LCR* IE, *Time Slot LCR* IE], or *TFCI presence* IE or the message includes UL/DL Code information and includes [*3.84Mcps TDD - TDD Channelisation Code* IE], [*1.28Mcps TDD - TDD Channelisation Code LCR* IE], the Node B shall apply these specified information elements as the new values, otherwise the old values specified for this DPCH configuration are still applicable.]
- [1.28Mcps TDD – If the *UL CCTrCH to Modify* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control according [19] and [21] when the new configuration is being used.]

[TDD – UL/DL CCTrCH Addition]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Add* IE or *DL CCTrCH to Add* IE, the Node B shall include this CCTrCH in the new configuration.]

[TDD – If the *UL/DL CCTrCH to Add* IE includes any *UL/DL DPCH Information* IE, the Node B shall reserve necessary resources for the new configuration of the UL/DL DPCH(s) according to the parameters given in the message.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL CCTrCH to Add* IE, the Node B shall set the TPC step size of that CCTrCH to the same value as the lowest numbered DL CCTrCH in the current configuration.]

[1.28Mcps TDD –The Node B shall use the *UL SIR Target* IE in the *UL CCH to Add* IE as the UL SIR value for the inner loop power control for this CCH according [19] and [21] in the new configuration.]

[TDD – UL/DL CCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any UL or DL CCH to be deleted , the Node B shall remove this CCH in the new configuration.]

DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH to modify*, *DSCH to add* or *DSCH to delete* IEs, then the Node B shall use this information to add/modify/delete the indicated DSCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DSCH.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Information* IE then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received if one does not already exist or shall apply the new values if such a bearer does already exist. The *Binding ID* IE and *Transport Layer Address* IE of any new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message. If the RADIO LINK RECONFIGURATION PREPARE message specifies that the TFCI2 transport bearer is to be deleted then the Node B shall release the resources associated with that bearer in the new configuration.

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI field but a TFCI2 transport bearer has not already been set up and *TFCI2 Bearer Information* IE is not included in the message then the Node B shall transmit the TFCI2 field with zero power in the new configuration.]

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information* IE is included in the message then the Node B shall transmit the TFCI2 field with zero power until Synchronisation is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer in the new configuration (see ref. [24]).]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *DSCH Common Information IE*, the Node B shall treat it as follows:]

- [FDD - If the *Enhanced DSCH PC Indicator* IE is included and set to "Enhanced DSCH PC Active in the UE ", the Node B shall activate enhanced DSCH power control in accordance with ref. [10] subclause 5.2.2, if supported, using either:]
 - [FDD - the *SSDT Cell Identity for EDSCHPC* IE in the *RL Information* IE, if the *SSDT Cell Identity* IE is not included in the *RL Information* IE or]
 - [FDD - the *SSDT Cell Identity* IE in the *RL Information* IE, if both the *SSDT Cell Identity* IE and the *SSDT Cell Identity for EDSCHPC* IE are included in the *RL Information* IE.]

[FDD - together with the *SSDT Cell Identity Length* IE in *UL DPCH Information* IE, and *Enhanced DSCH PC* IE, in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Enhanced DSCH PC Indicator* IE set to "Enhanced DSCH PC not Active in the UE", the Node B shall deactivate enhanced DSCH power control in the new configuration.]

[TDD – USCH Addition/Modification/Deletion:]

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]

- [TDD – The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each USCH.]

RL Information:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B may activate SSDT using the *SSDT Cell Identity* IE in the new configuration.]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the Node B shall deactivate SSDT in the new configuration.]
- [FDD – If the *RL Information* IE includes a *DL Code Information* IE, the Node B shall apply the values in the new configuration.]
- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- If the *RL Information* IE includes the *Maximum DL Power* and/or the *Minimum DL Power* IEs, the Node B shall apply the values in the new configuration. [FDD - During compressed mode, the $P_{SIR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k .]
- [TDD – If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall apply the given power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu is achieved for the CCTrCH. If no *Initial DL Transmission power* IE is included with a new CCTrCH, the Node B shall use any transmission power level currently used on already existing CCTrCH's when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]

[TDD - PDSCH RL ID]

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *PDSCH RL ID* IE then in the new configuration the Node B shall use the PDSCH and/or PUSCH in this radio link.]

General

If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exist a Prepared Reconfiguration, as defined in subclause 3.1.

In the RADIO LINK RECONFIGURATION READY message, the Node B shall include the *RL Information Response* IE for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the Transport Layer Address and the Binding ID for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In case of a DCH requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* shall be included in the IE *DCH Information Response* IE.

In case of a set of coordinated DCHs requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the DCH in the set of coordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the Node B, the RL Information Response IE shall be included only for one of the combined RLs. The *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

***** UNAFFECTED TEXT *****

9.1.36 RADIO LINK SETUP REQUEST

***** UNAFFECTED TEXT *****

9.1.36.2 TDD message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CTrCH Information		0 to <maxno CTrCH>			EACH	notify
>CTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
> UL SIR Target	O		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD; not applicable for 3.84Mcps TDD	YES	reject
>UL DPCH Information		0..1		For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH Information LCR		0..1		For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
DL CTrCH Information		0 to <maxno CTrCH>			EACH	notify
>CTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
>TDD TPC DL Step Size	M		9.2.3.21		–	
>TPC CTrCH List		0 to <maxnoC CTrCH>		List of uplink CTrCH which provide TPC	–	
>>TPC CTrCH ID	M		CTrCH ID 9.2.3.3		–	

>DL DPCH information		0..1		For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH information LCR		0..1		For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.4O		–	
>>TSTD Indicator	M		9.2.1.64		–	
DCH Information	O		DCH TDD Information 9.2.3.4C		YES	reject
DSCH Information	O		DSCH TDD Information 9.2.3.5A		YES	reject
USCH Information	O		9.2.3.28		YES	reject
RL Information		1			YES	reject
>RL ID	M		9.2.1.53		–	
>C-ID	M		9.2.1.9		–	
>Frame Offset	M		9.2.1.31		–	
>Special Burst Scheduling	M		9.2.3.18A		–	
>Initial DL transmission Power	M		DL Power 9.2.1.21	Initial power on DPCH	–	
>Maximum DL power	M		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL power	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>DL Time Slot ISCP Info	O		9.2.3.4F	For 3.84Mcps TDD only	–	
>DL Time Slot ISCP Info LCR	O		9.2.3.40A	For 1.28Mcps TDD only	YES	reject
<u>PDSCH-RL-ID</u>	<u>O</u>		<u>RL ID 9.2.1.53</u>		<u>YES</u>	<u>ignore</u>

Range bound	Explanation
MaxnoCCTrCH	Number of CCTrCH for one UE.

***** UNAFFECTED TEXT *****

9.1.42 RADIO LINK RECONFIGURATION PREPARE

***** UNAFFECTED TEXT *****

9.1.42.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCH to Add		0..<maxno of CCHs>			GLOBAL	reject
>CCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
> UL SIR Target	O		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD; not applicable for 3.84Mcps TDD	YES	reject
>UL DPCH Information		0..1		For 3.84Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH Information LCR		0..1		For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
UL CCH to Modify		0..<maxno of CCHs>			GLOBAL	reject
>CCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>TFCI Coding	O		9.2.3.22		–	
>Puncture Limit	O		9.2.1.50		–	
> UL SIR Target	O		UL SIR 9.2.1.67A	For 1.28Mcps TDD only	YES	reject
>UL DPCH to add		0..1		For 3.84Mcps TDD only	YES	reject

>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH to modify		0..1			YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD DPCH Offset	O		9.2.3.19A		–	
>>UL Timeslot Information		0 to <maxno ofULts>		For 3.84Mcps TDD only	–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift and Burst Type	O		9.2.3.7		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>UL Code Information		0 to <maxno OfDPC H>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code	O		9.2.3.19		–	
>>UL Timeslot Information LCR		0 to <Maxno ofULtsL CR>		For 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		–	
>>>Midamble shift LCR	O		9.2.3.7A		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>UL Code Information LCR		0 to <maxno OfDPC HLCR>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code LCR	O		9.2.3.19a		–	
>UL DPCH to delete		0.. <maxno of DPCHs >			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		–	
>UL DPCH to add LCR		0..1		For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
UL CCTrCH to Delete		0.. <maxno of CCTrC Hs>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	

DL CCH to Add		0.. <maxno of CCH Hs>			GLOBAL	reject
>CCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>PunctureLimit	M		9.2.1.50		–	
>TPC CCH List		0 to <maxno CCH Hs>		List of uplink CCH which provide TPC	–	
>>TPC CCH ID	M		CCH ID 9.2.3.3		–	
>DL DPCH Information		0..1		For 3.84Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH Information LCR		0..1		For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.4O		–	
DL CCH to Modify		0.. <maxno of CCH Hs>			GLOBAL	reject
>CCH ID	M		9.2.3.3.		–	
>TFCS	O		9.2.1.58		–	
>TFCI Coding	O		9.2.3.22		–	
>PunctureLimit	O		9.2.1.50		–	
>TPC CCH List		0 to <maxno CCH Hs>		List of uplink CCH which provide TPC	–	
>>TPC CCH ID	M		CCH ID 9.2.3.3		–	
>DL DPCH to add		0..1		For 3.84Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH to modify		0..1			YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD DPCH Offset	O		9.2.3.19A		–	

>>DL Timeslot Information		0 .. <maxno ofDLts>		For 3.84Mcps TDD only	–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift and Burst Type	O		9.2.3.7		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>DL Code Information		0 .. <maxno OfDPC H>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code	O		9.2.3.19		–	
>>DL Timeslot Information LCR		0 .. <Maxno ofDLtsL CR>		For 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		–	
>>>Midamble shift LCR	O		9.2.3.7A		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>DL Code Information LCR		0 .. <maxno OfDPC HLCRs >			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code LCR	O		9.2.3.19a		–	
>DL DPCH to delete		0.. <maxno of DPCHs >			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		–	
>DL DPCH to add LCR		0..1		For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.40		–	
DL CCTrCH to Delete		0.. <maxno of CCTrC Hs>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
DCHs to Modify	O		DCHs TDD to Modify 9.2.3.4D		YES	reject
DCHs to Add	O		DCH TDD Information 9.2.3.4C		YES	reject
DCHs to Delete		0..<max noofDC			GLOBAL	reject

		<i>Hs</i> >				
>DCH ID	M		9.2.1.20		–	
DSCH Information to modify		0 .. <Maxno of DSCHs >			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
>CCTrCH ID	O		9.2.3.3	DL CCTrCH in which the DSCH is mapped	–	
>Transport Format Set	O		9.2.1.59		–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>Frame Handling Priority	O		9.2.1.30		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	
>Transport Bearer Request Indicator	M		9.2.1.62A		–	
DSCH Information to add	O		DSCH TDD Information 9.2.3.5A		YES	reject
DSCH Information to delete		0 .. <Maxno of DSCHs >			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
USCH Information to modify		0 .. <Maxno of USCHs >			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
>Transport Format Set	O		9.2.1.59		–	
> Allocation/Retention Priority	O		9.2.1.1A		–	
>CCTrCH ID	O		9.2.3.2	UL CCTrCH in which the USCH is mapped	–	
>Transport Bearer Request Indicator	M		9.2.1.62A		–	
USCH Information to add	O		USCH Information 9.2.3.28		YES	reject
USCH Information to delete		0 .. <Maxno of USCHs >			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
RL Information		0..1			YES	reject
>RL ID	M		9.2.1.53		–	
>Maximum Downlink Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum Downlink Power	O		DL Power	Minimum	–	

			9.2.1.21	allowed power on DPCH		
>Initial DL transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore
<u>PDSCH-RL-ID</u>	<u>O</u>		<u>RL ID 9.2.1.53</u>		<u>YES</u>	<u>ignore</u>

Range Bound	Explanation
<i>MaxnoofDCHs</i>	Maximum number of DCHs for a UE.
<i>MaxnoofCCTrCHs</i>	Maximum number of CCTrCHs for a UE.
<i>Maxnoof DPCHs</i>	Maximum number of DPCHs in one CCTrCH for 3.84Mcps TDD.
<i>MaxnoOfDPCHLCRs</i>	Maximum number of DPCHs in one CCTrCH for 1.28Mcps TDD.
<i>MaxnoofDSCHs</i>	Maximum number of DSCHs for one UE
<i>MaxnoofUSCHs</i>	Maximum number of USCHs for one UE
<i>MaxnoofDLts</i>	Maximum number of Downlink time slots per Radio Link for 3.84Mcps TDD.
<i>MaxnoofDLtsLCR</i>	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.
<i>MaxnoofULts</i>	Maximum number of Uplink time slots per Radio Link for 3.84Mcps TDD.
<i>MaxnoofULtsLCR</i>	Maximum number of Uplink time slots per Radio Link for 1.28Mcps TDD.

***** UNAFFECTED TEXT *****

9.3.3 PDU Definitions

```

-- *****
--
-- PDU definitions for NBAP.
--
-- *****

NBAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
  Active-Pattern-Sequence-Information,
  AddorDeleteIndicator,
  AICH-Power,
  AICH-TransmissionTiming,
  AllocationRetentionPriority,
  APPreambleSignature,
  APSubChannelNumber,
  AvailabilityStatus,
  BCCH-ModificationTime,
  BindingID,
  BlockingPriorityIndicator,
  SCTD-Indicator,
  Cause,
  CCTrCH-ID,
  CDSubChannelNumbers,
  CellParameterID,
  CellSyncBurstAvailabilityIndicator,
  CellSyncBurstCode,
  CellSyncBurstCodeShift,
  CellSyncBurstRepetitionPeriod,
  CellSyncBurstSIR,
  CellSyncBurstTiming,
  CellSyncBurstTimingThreshold,
  CFN,
  Channel-Assignment-Indication,
  ChipOffset,
  C-ID,
  Closedlooptimingadjustmentmode,

```

CommonChannelsCapacityConsumptionLaw,
Compressed-Mode-Deactivation-Flag,
CommonMeasurementAccuracy,
CommonMeasurementType,
CommonMeasurementValue,
CommonMeasurementValueInformation,
CommonPhysicalChannelID,
Common-PhysicalChannel-Status-Information,
Common-TransportChannel-Status-Information,
CommonTransportChannelID,
CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue,
CriticalityDiagnostics,
CPCH-Allowed-Total-Rate,
CPCHScramblingCodeNumber,
CPCH-UL-DPCH-SlotFormat,
CRNC-CommunicationContextID,
CSBMeasurementID,
CSBTransmissionID,
DCH-FDD-Information,
DCH-InformationResponse,
DCH-ID,
FDD-DCHs-to-Modify,
TDD-DCHs-to-Modify,
DCH-TDD-Information,
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-or-Global-CapacityCredit,
DL-Power,
DLPowerAveragingWindowSize,
DL-ScramblingCode,
DL-TimeslotISCP,
DL-Timeslot-Information,
DL-TimeslotLCR-Information,
DL-TimeslotISCPInfo,
DL-TimeslotISCPInfoLCR,
DL-TPC-Pattern01Count,
DPC-Mode,
DPCH-ID,
DSCH-ID,
DSCH-FDD-Common-Information,
DSCH-FDD-Information,
DSCH-InformationResponse,
DSCH-TDD-Information,
DwPCH-Power,
End-Of-Audit-Sequence-Indicator,

EnhancedDSCHPC,
EnhancedDSCHPCCounter,
EnhancedDSCHPCIndicator,
EnhancedDSCHPCWnd,
EnhancedDSCHPowerOffset,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FPACH-Power,
FrameAdjustmentValue,
FrameHandlingPriority,
FrameOffset,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,
IB-Type,
IndicationType,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
InnerLoopDLPCStatus,
IPDL-FDD-Parameters,
IPDL-TDD-Parameters,
IPDL-Indicator,
LimitedPowerIncrease,
Local-Cell-ID,
MaximumDL-PowerCapability,
MaximumTransmissionPower,
Max-Number-of-PCPCHes,
MaxNrOfUL-DPDCHs,
MaxPRACH-MidambleShifts,
MeasurementFilterCoefficient,
MeasurementID,
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftLCR,
MinimumDL-PowerCapability,
MinSpreadingFactor,
MinUL-ChannelisationCodeLength,
MultiplexingPosition,
NEOT,
NCyclesPerSFNperiod,
NFmax,
NRepetitionsPerCyclePeriod,
N-INSYNC-IND,
N-OUTSYNC-IND,
NeighbouringCellMeasurementInformation,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation,

NodeB-CommunicationContextID,
NStartMessage,
PagingIndicatorLength,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PCP-Length,
PDSCH-CodeMapping,
PDSCHSet-ID,
PDSCH-ID,
PICH-Mode,
PICH-Power,
PowerAdjustmentType,
PowerOffset,
PowerRaiseLimit,
PRACH-Midamble,
PreambleSignatures,
PreambleThreshold,
PredictedSFNSFNDeviationLimit,
PredictedTUTRANGPSDeviationLimit,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
SCH-TimeSlot,
PunctureLimit,
PUSCHSet-ID,
PUSCH-ID,
QE-Selector,
RACH-SlotFormat,
RACH-SubChannelNumbers,
ReferenceClockAvailability,
ReferenceSFNOffset,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
RequestedDataValue,
RequestedDataValueInformation,
ResourceOperationalState,
RL-Set-ID,
RL-ID,
Received-total-wide-band-power-Value,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
RNC-ID,
ScramblingCodeNumber,
SecondaryCCPCH-SlotFormat,
Segment-Type,
S-FieldLength,
SFN,
SFNSFNChangeLimit,
SFNSFNDriftRate,
SFNSFNDriftRateQuality,
SFNSFNQuality,

ShutdownTimer,
SIB-Originator,
SpecialBurstScheduling,
SSDT-Cell-Identity,
SSDT-CellID-Length,
SSDT-Indication,
Start-Of-Audit-Sequence-Indicator,
STTD-Indicator,
SSDT-SupportIndicator,
SyncCase,
SYNCD1CodeId,
SyncFrameNumber,
SynchronisationReportCharacteristics,
SynchronisationReportType,
T-Cell,
T-RLFAILURE,
TDD-ChannelisationCode,
TDD-ChannelisationCodeLCR,
TDD-DL-Code-LCR-Information,
TDD-DPCHOffset,
TDD-TPC-DownlinkStepSize,
TDD-PhysicalChannelOffset,
TDD-UL-Code-LCR-Information,
TFCI2-BearerInformationResponse,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TFCS,
TimeSlot,
TimeSlotLCR,
TimeSlotDirection,
TimeSlotStatus,
TimingAdjustmentValue,
TimingAdvanceApplied,
ToAWE,
ToAWS,
TransmissionDiversityApplied,
TransmitDiversityIndicator,
TransmissionGapPatternSequenceCodeInformation,
Transmission-Gap-Pattern-Sequence-Information,
TransportBearerRequestIndicator,
TransportFormatSet,
TransportLayerAddress,
TSTD-Indicator,
TUTRANGPS,
TUTRANGPSChangeLimit,
TUTRANGPSDriftRate,
TUTRANGPSDriftRateQuality,
TUTRANGPSQuality,
UARFCN,
UC-Id,
USCH-Information,


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USCH-InformationResponse,
UL-CapacityCredit,
UL-DPCCH-SlotFormat,
UL-SIR,
UL-FP-Mode,
UL-PhysCH-SF-Variation,
UL-ScramblingCode,
UL-Timeslot-Information,
UL-TimeslotLCR-Information,
UL-TimeSlot-ISCP-Info,
UL-TimeSlot-ISCP-LCR-Info,
UL-TimeslotISCP-Value,
UL-TimeslotISCP-Value-IncrDecrThres,
USCH-ID
FROM NBAP-IEs

PrivateIE-Container{},
ProtocolExtensionContainer{},
ProtocolIE-Container{},
ProtocolIE-Single-Container{},
ProtocolIE-ContainerList{},
NBAP-PRIVATE-IES,
NBAP-PROTOCOL-IES,
NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers

id-Active-Pattern-Sequence-Information,
id-AdjustmentRatio,
id-AICH-Information,
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-AP-AICH-Information,
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-BCH-Information,
id-BCCH-ModificationTime,
id-BlockingPriorityIndicator,
id-Cause,
id-CauseLevel-PSCH-ReconfFailureTDD,
id-CauseLevel-RL-AdditionFailureFDD,
id-CauseLevel-RL-AdditionFailureTDD,
id-CauseLevel-RL-ReconfFailure,
id-CauseLevel-RL-SetupFailureFDD,
id-CauseLevel-RL-SetupFailureTDD,
id-CauseLevel-SyncAdjustmntFailureTDD,
id-CCP-InformationItem-AuditRsp,
id-CCP-InformationList-AuditRsp,
id-CCP-InformationItem-ResourceStatusInd,
id-CCTrCH-InformationItem-RL-FailureInd,
id-CCTrCH-InformationItem-RL-RestoreInd,
id-CDCA-ICH-Information,
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD,
id-CellAdjustmentInfoItem-SyncAdjustmntRqstTDD,
id-Cell-InformationItem-AuditRsp,
```

id-Cell-InformationItem-ResourceStatusInd,
id-Cell-InformationList-AuditRsp,
id-CellParameterID,
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD,
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD,
id-cellSyncBurstRepetitionPeriod,
id-CellSyncBurstTransReconfReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD,
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD,
id-CellSyncInfo-CellSyncReprtTDD,
id-CFN,
id-CFNReportingIndicator,
id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD,
id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID,
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-CPCH-Information,
id-CPCH-Parameters-CTCH-SetupRsp,
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-CSBTransmissionID,
id-CSBMeasurementID,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,

id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-TPC-Pattern01Count,
id-DPC-Mode,
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteList-RL-ReconfPrepFDD,
id-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-FDD-Common-Information,
id-DSCH-TDD-Information,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-End-Of-Audit-Sequence-Indicator,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator,
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRqstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstTDD,
id-IndicationType-ResourceStatusInd,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rqst,
id-InformationExchangeObjectType-InfEx-Rsp,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationReportCharacteristics,

id-InformationType,
id-InitDL-Power,
id-InnerLoopDLPCStatus,
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
id-IPDLParameter-Information-Cell-ReconfRqstFDD,
id-IPDLParameter-Information-Cell-SetupRqstFDD,
id-IPDLParameter-Information-Cell-ReconfRqstTDD,
id-IPDLParameter-Information-Cell-SetupRqstTDD,
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
id-Limited-power-increase-information-Cell-SetupRqstFDD,
id-Local-Cell-ID,
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp,
id-Local-Cell-InformationItem-ResourceStatusInd,
id-Local-Cell-InformationItem2-ResourceStatusInd,
id-Local-Cell-InformationList-AuditRsp,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MaximumTransmissionPower,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,
id-NCyclesPerSFNperiod,
id-NeighbouringCellMeasurementInformation,
id-NodeB-CommunicationContextID,
id-NRepetitionsPerCyclePeriod,
id-P-CCPCH-Information,
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRqstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRqstTDD,
id-PCH-Parameters-CTCH-SetupRsp,
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstTDD,
id-PCH-Information,
id-PCPCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRqstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PDSCH-RL-ID,
id-PDSCHSets-AddList-PSCH-ReconfRqst,
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRqstTDD,
id-PICH-ParametersItem-CTCH-SetupRqstTDD,
id-PowerAdjustmentType,
id-PRACH-Information,

id-PRACHConstant,
id-PRACH-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRqstFDD,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,
id-PrimarySCH-Information-Cell-SetupRqstFDD,
id-PrimaryScramblingCode,
id-SCH-Information-Cell-ReconfRqstTDD,
id-SCH-Information-Cell-SetupRqstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PUSCHConstant,
id-PUSCHSets-AddList-PSCH-ReconfRqst,
id-PUSCHSets-DeleteList-PSCH-ReconfRqst,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,
id-RACH-ParametersItem-CTCH-SetupRqstFDD,
id-RACH-ParameterItem-CTCH-SetupRqstTDD,
id-ReferenceClockAvailability,
id-ReferenceSFNoffset,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRqstFDD,
id-RL-informationItem-RL-DeletionRqst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
id-RL-InformationItem-RL-RestoreInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-informationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRqstFDD,
id-RL-InformationList-RL-SetupRqstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,

id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-ReconfRqstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-S-CCPCH-Information,
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-SecondarySCH-Information-Cell-ReconfRqstFDD,
id-SecondarySCH-Information-Cell-SetupRqstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-SSDT-CellIDforEDSCHPC,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH,
id-SyncFrameNumber,
id-SynchronisationReportType,
id-SynchronisationReportCharacteristics,
id-SyncReportType-CellSyncReprtTDD,
id-T-Cell,
id-TFCI2-Bearer-Information-RL-SetupRqstFDD,
id-TFCI2-BearerInformationResponse,
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-timeslotInfo-CellSyncInitiationRqstTDD,
id-TimeslotISCPInfo,
id-TimingAdvanceApplied,
id-TransmissionDiversityApplied,
id-UARFCNforNt,
id-UARFCNforNd,

id-UARFCNforNu,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-UL-DPCH-InformationList-RL-SetupRqstTDD,
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD,
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,
id-USCH-Information-Add,
id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
id-USCH-InformationResponse,
id-USCH-Information,
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD,
id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD,
id-DwPCH-LCR-Information,
id-DwPCH-LCR-Information-AuditRsp,
id-DwPCH-LCR-InformationList-AuditRsp,
id-DwPCH-LCR-Information-Cell-SetupRqstTDD,
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD,
id-DwPCH-LCR-Information-ResourceStatusInd,
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD,
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD,
id-FPACH-LCR-Information,
id-FPACH-LCR-Information-AuditRsp,
id-FPACH-LCR-InformationList-AuditRsp,
id-FPACH-LCR-InformationList-ResourceStatusInd,
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD,
id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD,
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD,
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-ReconfRqstTDD,
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD,

id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD,
 id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD,
 id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD,
 id-RL-InformationResponse-LCR-RL-SetupRspTDD,
 id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD,
 id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD,
 id-TimeSlot,
 id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,
 id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD,
 id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD,
 id-TimeSlotLCR-CM-Rqst,
 id-UL-DPCH-LCR-Information-RL-SetupRqstTDD,
 id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD,
 id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
 id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
 id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD,
 id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
 id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
 id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
 id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
 id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD,
 id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD,
 id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
 id-UL-DPCH-LCR-InformationModify-AddList,
 id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
 id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD,
 id-UL-SIRTarget,
 id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst,
 id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
 id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
 id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
 id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst,
 id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
 id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
 id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
 id-PUSCH-Info-DM-Rqst,
 id-PUSCH-Info-DM-Rsp,
 id-PUSCH-Info-DM-Rprt,
 id-RL-InformationResponse-LCR-RL-AdditionRspTDD,

 maxNrOfCCTrCHs,
 maxNrOfCellSyncBursts,
 maxNrOfCodes,
 maxNrOfCPCHs,
 maxNrOfDCHs,
 maxNrOfDLTSs,
 maxNrOfDLTSLCRs,
 maxNrOfDPCHs,
 maxNrOfDSCHs,
 maxNrOfFACHs,
 maxNrOfRLs,
 maxNrOfRLs-1,
 maxNrOfRLs-2,


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maxNrOfRLSets,
maxNrOfPCPCHs,
maxNrOfPDSCHs,
maxNrOfPUSCHs,
maxNrOfPRACHLCRs,
maxNrOfPDSCHSets,
maxNrOfPUSCHSets,
maxNrOfReceptsPerSyncFrame,
maxNrOfSCCPCHs,
maxNrOfSCCPCHLCRs,
maxNrOfULTSs,
maxNrOfULTSLCRs,
maxNrOfUSCHs,
maxAPSigNum,
maxCPCHCell,
maxFACHCell,
maxFPACHCell,
maxNoofLen,
maxRACHCell,
maxPCPCHCell,
maxPRACHCell,
maxSCCPCHCell,
maxSCPICHCell,
maxCellinNodeB,
maxCCPinNodeB,
maxCommunicationContext,
maxLocalCellinNodeB,
maxNrOfSlotFormatsPRACH,
maxNrOfCellSyncBursts,
maxNrOfReceptsPerSyncFrame,
maxIB,
maxIBSEG
FROM NBAP-Constants;

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK SETUP REQUEST TDD
--
-- *****

```

```

RadioLinkSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}}
    ...
}

```

```

RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID          CRITICALITY reject          TYPE          CRNC-CommunicationContextID
      PRESENCE mandatory }|

```

```

    { ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD          CRITICALITY notify          TYPE          UL-CCTrCH-InformationList-RL-
SetupRqstTDD          PRESENCE optional          }|
    { ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD          CRITICALITY notify          TYPE          DL-CCTrCH-InformationList-RL-
SetupRqstTDD          PRESENCE optional          }|
    { ID id-DCH-TDD-Information          CRITICALITY reject          TYPE          DCH-TDD-Information          PRESENCE optional }|
    { ID id-DSCH-TDD-Information          CRITICALITY reject          TYPE          DSCH-TDD-Information          PRESENCE optional }|
    { ID id-USCH-Information          CRITICALITY reject          TYPE          USCH-Information          PRESENCE optional }|
    { ID id-RL-Information-RL-SetupRqstTDD          CRITICALITY reject          TYPE          RL-Information-RL-SetupRqstTDD
          PRESENCE mandatory          },
    ...
}

RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-PDSCH-RL-ID          CRITICALITY ignore          EXTENSION RL-ID          PRESENCE optional },
  ...
}

UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
  ProtocolIE-Single-Container{{ UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD          CRITICALITY          notify          TYPE          UL-CCTrCH-InformationItem-RL-
SetupRqstTDD          PRESENCE          mandatory}
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  tFCS          TFCS,
  tFCI-Coding          TFCI-Coding,
  punctureLimit          PunctureLimit,
  uL-DPCH-Information          UL-DPCH-Information-RL-SetupRqstTDD          OPTIONAL, -- For 3.84Mcps TDD only
  iE-Extensions          ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }          OPTIONAL,
  ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-DPCH-LCR-Information-RL-SetupRqstTDD          CRITICALITY          notify          EXTENSION          UL-DPCH-LCR-Information-RL-SetupRqstTDD          PRESENCE          optional
  }| -- For 1.28Mcps TDD only
  { ID id-UL-SIRTarget          CRITICALITY          reject          EXTENSION          UL-SIR          PRESENCE          optional          },
  -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
  ...
}

UL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationList-RL-SetupRqstTDD          CRITICALITY          notify          TYPE          UL-DPCH-InformationItem-RL-SetupRqstTDD          PRESENCE          mandatory          }
}

UL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset          TDD-DPCHOffset,
}

```

```

    uL-Timeslot-Information          UL-Timeslot-Information,
    iE-Extensions                    ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD      CRITICALITY notify   TYPE UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD      PRESENCE
optional    }
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    uL-TimeslotLCR-Information  UL-TimeslotLCR-Information,
    iE-Extensions         ProtocolExtensionContainer { { UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container{{ DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD      CRITICALITY      notify
RL-SetupRqstTDD      PRESENCE      mandatory}
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID            CCTrCH-ID,
    tFCS                 TFCS,
    tFCI-Coding          TFCI-Coding,
    punctureLimit        PunctureLimit,
    tdd-TPC-DownlinkStepSize  TDD-TPC-DownlinkStepSize,
    cCTrCH-TPCList        CCTrCH-TPCList-RL-SetupRqstTDD      OPTIONAL,
    dL-DPCH-Information  DL-DPCH-Information-RL-SetupRqstTDD  OPTIONAL,    -- For 3.84Mcps TDD only
    iE-Extensions         ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify      EXTENSION      DL-DPCH-LCR-Information-RL-SetupRqstTDD      PRESENCE optional
}, -- For 1.28Mcps TDD only
    ...
}

```

```

}

CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD

CCTrCH-TPCItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationList-RL-SetupRqstTDD    CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-SetupRqstTDD    PRESENCE mandatory }
}

DL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod        RepetitionPeriod,
    repetitionLength        RepetitionLength,
    tdd-DPCHOffset          TDD-DPCHOffset,
    dL-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions            ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD    CRITICALITY notify TYPE DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD    PRESENCE
mandatory }
}

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod        RepetitionPeriod,
    repetitionLength        RepetitionLength,
    tdd-DPCHOffset          TDD-DPCHOffset,
    dL-TimeslotLCR-Information DL-TimeslotLCR-Information,
    tstdIndicator            TSTD-Indicator,
    iE-Extensions            ProtocolExtensionContainer { { DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    c-ID                C-ID,
    frameOffset         FrameOffset,
    specialBurstScheduling SpecialBurstScheduling,
    initialDL-transmissionPower DL-Power,
    maximumDL-power     DL-Power,
    minimumDL-power     DL-Power,
    dL-TimeSlotISCPInfo DL-TimeSlotISCPInfo OPTIONAL, -- For 3.84Mcps TDD only
    iE-Extensions       ProtocolExtensionContainer { { RL-Information-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TimeSlotISCP-LCR-InfoList-RL-SetupRqstTDD CRITICALITY reject EXTENSION TimeSlotISCP-LCR-InfoList-RL-SetupRqstTDD PRESENCE
optional }, -- For 1.28Mcps TDD only
    ...
}

TimeSlotISCP-LCR-InfoList-RL-SetupRqstTDD ::= SEQUENCE {
    dL-TimeSlotISCP-LCR-Info DL-TimeSlotISCPInfoLCR,
    iE-Extensions           ProtocolExtensionContainer { {TimeSlotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

TimeSlotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE TDD
--
-- *****

```

```

RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
    protocolIEs           ProtocolIE-Container { {RadioLinkReconfigurationPrepareTDD-IEs} },
    protocolExtensions   ProtocolExtensionContainer { {RadioLinkReconfigurationPrepareTDD-Extensions} } OPTIONAL,
    ...
}

RadioLinkReconfigurationPrepareTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID CRITICALITY reject TYPE NodeB-CommunicationContextID
    PRESENCE mandatory } |
    { ID id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-CCTrCH-
InformationAddList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-CCTrCH-
InformationModifyList-RL-ReconfPrepTDD PRESENCE optional } |
}

```

```

    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
InformationDeleteList-RL-ReconfPrepTDD PRESENCE optional CRITICALITY reject TYPE UL-CCTrCH-
    { ID id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
InformationAddList-RL-ReconfPrepTDD PRESENCE optional CRITICALITY reject TYPE DL-CCTrCH-
    { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
InformationModifyList-RL-ReconfPrepTDD PRESENCE optional CRITICALITY reject TYPE DL-CCTrCH-
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
InformationDeleteList-RL-ReconfPrepTDD PRESENCE optional CRITICALITY reject TYPE DL-CCTrCH-
    { ID id-TDD-DCHs-to-Modify
    CRITICALITY reject TYPE TDD-DCHs-to-Modify PRESENCE optional
    } |
    { ID id-DCHs-to-Add-TDD
    CRITICALITY reject TYPE DCH-TDD-Information PRESENCE optional
    } |
    { ID id-DCH-DeleteList-RL-ReconfPrepTDD
    PRESENCE optional CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepTDD
    } |
    { ID id-DSCH-Information-ModifyList-RL-ReconfPrepTDD
ReconfPrepTDD PRESENCE optional CRITICALITY reject TYPE DSCH-Information-ModifyList-RL-
    { ID id-DSCHs-to-Add-TDD
    CRITICALITY reject TYPE DSCH-TDD-Information PRESENCE optional } |
    { ID id-DSCH-Information-DeleteList-RL-ReconfPrepTDD
ReconfPrepTDD PRESENCE optional CRITICALITY reject TYPE DSCH-Information-DeleteList-RL-
    { ID id-USCH-Information-ModifyList-RL-ReconfPrepTDD
ReconfPrepTDD PRESENCE optional CRITICALITY reject TYPE USCH-Information-ModifyList-RL-
    { ID id-USCH-Information-Add
    CRITICALITY reject TYPE USCH-Information PRESENCE optional } |
    { ID id-USCH-Information-DeleteList-RL-ReconfPrepTDD
ReconfPrepTDD PRESENCE optional CRITICALITY reject TYPE USCH-Information-DeleteList-RL-
    { ID id-RL-Information-RL-ReconfPrepTDD
    PRESENCE optional CRITICALITY reject TYPE RL-Information-RL-ReconfPrepTDD
    } ,
    ...
}

RadioLinkReconfigurationPrepareTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PDSCH-RL-ID
    CRITICALITY ignore EXTENSION RL-ID PRESENCE optional } ,
    ...
}

UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID CCTrCH-ID,
    tFCS TFCS,
    tFCI-Coding TFCI-Coding,
    punctureLimit PunctureLimit,
    ul-DPCH-InformationList UL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD
    PRESENCE optional } | -- For 3.84Mcps TDD only
    { ID id-UL-SIRTarget
    CRITICALITY reject EXTENSION UL-SIR PRESENCE optional } ,
    -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
    ...
}

```

```

UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}

UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD  CRITICALITY reject      TYPE UL-DPCH-InformationAddItem-RL-ReconfPrepTDD      PRESENCE
  mandatory }
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  uL-Timeslot-Information  UL-Timeslot-Information,
  iE-Extensions         ProtocolExtensionContainer { { UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }      OPTIONAL,
  ...
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD }}

UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD  CRITICALITY reject      TYPE UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
  PRESENCE mandatory } -- For 1.28Mcps TDD only
}

UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  uL-Timeslot-InformationLCR  UL-TimeslotLCR-Information,
  iE-Extensions         ProtocolExtensionContainer { { UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }      OPTIONAL,
  ...
}

UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID      CCTrCH-ID,
  tFCS           TFCS                                     OPTIONAL,
  tFCI-Coding    TFCI-Coding                             OPTIONAL,
  punctureLimit  PunctureLimit                           OPTIONAL,
  ul-DPCH-InformationAddList  UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD      OPTIONAL,
  ul-DPCH-InformationModifyList  UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD      OPTIONAL,
  ul-DPCH-InformationDeleteList  UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD      OPTIONAL,
  iE-Extensions         ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
}

```

```

}
...
}
UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-DPCH-LCR-InformationModify-AddList CRITICALITY reject EXTENSION UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
  PRESENCE optional } | -- For 1.28Mcps TDD only
  { ID id-UL-SIRTarget CRITICALITY reject EXTENSION UL-SIR PRESENCE optional },
  -- This IE shall be applicable for 1.28Mcps TDD only.
  ...
}
UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}
UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
  PRESENCE mandatory }
}
UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-DPCHOffset TDD-DPCHOffset,
  uL-Timeslot-Information UL-Timeslot-Information,
  iE-Extensions ProtocolExtensionContainer { { UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}
UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD
}}
UL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-LCR-InformationModify-AddItem-RL-
  ReconfPrepTDD PRESENCE mandatory }
}
UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-DPCHOffset TDD-DPCHOffset,
  uL-Timeslot-InformationLCR UL-TimeslotLCR-Information,
  iE-Extensions ProtocolExtensionContainer { { UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}
UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
}

```



```
UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD }}
```

```
UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationModify-ModifyItem-RL-
  ReconfPrepTDD PRESENCE mandatory }
}
```

```
UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod OPTIONAL,
  repetitionLength RepetitionLength OPTIONAL,
  tdd-DPCHOffset TDD-DPCHOffset OPTIONAL,
  uL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}
```

```
UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-TimeslotLCR-InformationModify-ModifyList-RL-
  ReconfPrepTDD PRESENCE optional }, -- For 1.28Mcps TDD only
  ...
}
```

```
UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD -- For 3.84Mcps TDD only
```

```
UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  timeSlot TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
  tFCI-Presence TFCI-Presence OPTIONAL,
  uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}
```

```
UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD
```

```
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dPCH-ID DPCH-ID,
  tdd-ChannelisationCode TDD-ChannelisationCode OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}
```

```
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```

}

UL-TimeslotLCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfPrepTDD -- For 1.28Mcps TDD only
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR                               TimeSlotLCR,
    midambleShiftLCR                          MidambleShiftLCR OPTIONAL,
    tFCI-Presence                              TFCI-Presence OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLcr UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLcr OPTIONAL,
    iE-Extensions                             ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLcr ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLcr ::= SEQUENCE {
    dPCH-ID                                    DPCH-ID,
    tdd-ChannelisationCodeLCR                 TDD-ChannelisationCodeLCR OPTIONAL,
    iE-Extensions                             ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLcr-ExtIEs } }
    OPTIONAL,
    ...
}

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLcr-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD PRESENCE mandatory }
}

UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                                    DPCH-ID,
    iE-Extensions                             ProtocolExtensionContainer { { UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    tFCS                     TFCS,
    tFCI-Coding              TFCI-Coding,
    punctureLimit            PunctureLimit,
    cCTrCH-TPCList           CCTrCH-TPCAddList-RL-ReconfPrepTDD                OPTIONAL,
    dl-DPCH-InformationList  DL-DPCH-InformationAddList-RL-ReconfPrepTDD    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD  CRITICALITY reject          EXTENSION          DL-DPCH-LCR-
InformationAddList-RL-ReconfPrepTDD      PRESENCE optional },      -- For 1.28Mcps TDD only
    ...
}

CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD      -- For 3.84Mcps TDD only

CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs} }      OPTIONAL,
    ...
}

CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD } }

DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-InformationAddItem-RL-ReconfPrepTDD      PRESENCE
mandatory }
}

```

```

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset           TDD-DPCHOffset,
    dl-Timeslot-Information   DL-Timeslot-Information,
    iE-Extensions            ProtocolExtensionContainer { { DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD }}

DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
    PRESENCE mandatory } -- For 1.28Mcps TDD only
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset           TDD-DPCHOffset,
    dl-Timeslot-InformationLCR DL-TimeslotLCR-Information,
    iE-Extensions            ProtocolExtensionContainer { { DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    tFCS                      TFCS OPTIONAL,
    tFCI-Coding               TFCI-Coding OPTIONAL,
    punctureLimit             PunctureLimit OPTIONAL,
    cCTrCH-TPCList            CCTrCH-TPCModifyList-RL-ReconfPrepTDD OPTIONAL,
    dl-DPCH-InformationAddList DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD OPTIONAL,
    dl-DPCH-InformationModifyList DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
    dl-DPCH-InformationDeleteList DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
    { ID id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject EXTENSION DL-DPCH-LCR-InformationModify-
    AddList-RL-ReconfPrepTDD PRESENCE optional }
}

```

```

}

CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID          CCTrCH-ID,
    iE-Extensions      ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }} --
For 3.84Mcps TDD only

DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
    PRESENCE mandatory } -- For 1.28Mcps TDD only
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dL-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD
}}

DL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-LCR-InformationModify-AddItem-RL-
ReconfPrepTDD PRESENCE mandatory }
}

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dL-Timeslot-InformationLCR DL-TimeslotLCR-Information,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
    ...
}

```

```

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod          OPTIONAL,
  repetitionLength          RepetitionLength          OPTIONAL,
  tdd-DPCHOffset            TDD-DPCHOffset            OPTIONAL,
  dL-Timeslot-InformationAddModify-ModifyList-RL-ReconfPrepTDD  DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD  CRITICALITY reject          EXTENSION          DL-Timeslot-
LCR-InformationModify-ModifyList-RL-ReconfPrepTDD          PRESENCE optional },
  ...
}

DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  timeSlot          TimeSlot,
  midambleShiftAndBurstType          MidambleShiftAndBurstType          OPTIONAL,
  tFCI-Presence          TFCI-Presence          OPTIONAL,
  dL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD          DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD          OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dPCH-ID          DPCH-ID,
  tdd-ChannelisationCode          TDD-ChannelisationCode          OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

```

```

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModify-ModifyItem-
RL-ReconfPrepTDD

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR OPTIONAL,
    tFCI-Presence               TFCI-Presence OPTIONAL,
    dL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD

DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                    DPCH-ID,
    tdd-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { { DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD } }

DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD PRESENCE mandatory }
}

DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                    DPCH-ID,
    iE-Extensions               ProtocolExtensionContainer { { DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD

DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-ModifyItem-RL-ReconfPrepTDD

DSCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    cCTrCH-ID                CCTrCH-ID                OPTIONAL,
    transportFormatSet      TransportFormatSet        OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority    FrameHandlingPriority   OPTIONAL,
    toAWS                    ToAWS                    OPTIONAL,
    toAWE                    ToAWE                    OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    iE-Extensions            ProtocolExtensionContainer { { DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-DeleteItem-RL-ReconfPrepTDD

DSCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

```



```

}
DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
USCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-ModifyItem-RL-ReconfPrepTDD
USCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  uSCH-ID                USCH-ID,
  transportFormatSet     TransportFormatSet      OPTIONAL,
  allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
  cCTrCH-ID              CCTrCH-ID              OPTIONAL,
  transportBearerRequestIndicator TransportBearerRequestIndicator,
  iE-Extensions          ProtocolExtensionContainer { { USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }  OPTIONAL,
  ...
}
USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
USCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-DeleteItem-RL-ReconfPrepTDD
USCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  uSCH-ID                USCH-ID,
  iE-Extensions          ProtocolExtensionContainer { { USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }  OPTIONAL,
  ...
}
USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
RL-Information-RL-ReconfPrepTDD ::= SEQUENCE {
  rL-ID                RL-ID,
  maxDL-Power          DL-Power      OPTIONAL,
  minDL-Power          DL-Power      OPTIONAL,
  iE-Extensions        ProtocolExtensionContainer { { RL-Information-RL-ReconfPrepTDD-ExtIEs} }  OPTIONAL,
  ...
}
RL-Information-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-InitDL-Power      CRITICALITY ignore      EXTENSION DL-Power      PRESENCE optional      },
  ...
}

```

UNCHANGED TEXT IS REMOVED

-- *****
 --

```

-- IEs
--
-- *****

id-AICH-Information ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 1
id-BCH-Information ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 8
id-BCCH-ModificationTime ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator ProtocolIE-ID ::= 10
id-Cause ProtocolIE-ID ::= 13
id-CCP-InformationItem-AuditRsp ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp ProtocolIE-ID ::= 15
id-CCP-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp ProtocolIE-ID ::= 19
id-CellParameterID ProtocolIE-ID ::= 23
id-CFN ProtocolIE-ID ::= 24
id-C-ID ProtocolIE-ID ::= 25
id-CommonMeasurementAccuracy ProtocolIE-ID ::= 39
id-CommonMeasurementObjectType-CM-Rprt ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp ProtocolIE-ID ::= 33
id-CommonMeasurementType ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD ProtocolIE-ID ::= 37
id-CommunicationControlPortID ProtocolIE-ID ::= 40
id-ConfigurationGenerationID ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID ProtocolIE-ID ::= 44
id-CriticalityDiagnostics ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD ProtocolIE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD ProtocolIE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD ProtocolIE-ID ::= 54
id-DCH-DeleteList-RL-ReconfRqstTDD ProtocolIE-ID ::= 55
id-DCH-FDD-Information ProtocolIE-ID ::= 56
id-DCH-TDD-Information ProtocolIE-ID ::= 57
id-DCH-InformationResponse ProtocolIE-ID ::= 59
id-FDD-DCHs-to-Modify ProtocolIE-ID ::= 62
id-TDD-DCHs-to-Modify ProtocolIE-ID ::= 63
id-DCH-ModifyList-RL-ReconfRqstTDD ProtocolIE-ID ::= 65
id-DedicatedMeasurementObjectType-DM-Rprt ProtocolIE-ID ::= 67
id-DedicatedMeasurementObjectType-DM-Rqst ProtocolIE-ID ::= 68
id-DedicatedMeasurementObjectType-DM-Rsp ProtocolIE-ID ::= 69
id-DedicatedMeasurementType ProtocolIE-ID ::= 70
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD ProtocolIE-ID ::= 72
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD ProtocolIE-ID ::= 73
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD ProtocolIE-ID ::= 76
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD ProtocolIE-ID ::= 77

```

id-DL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 79
id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 83
id-DL-ReferencePowerInformationItem-DL-PC-Rqst	ProtocolIE-ID ::= 84
id-DLReferencePower	ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 86
id-DSCH-AddItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 87
id-DSCHs-to-Add-FDD	ProtocolIE-ID ::= 89
id-DSCH-DeleteItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 91
id-DSCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 100
id-DSCH-InformationResponse	ProtocolIE-ID ::= 105
id-DSCH-FDD-Information	ProtocolIE-ID ::= 106
id-DSCH-TDD-Information	ProtocolIE-ID ::= 107
id-DSCH-ModifyItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 108
id-DSCH-ModifyList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 112
id-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 113
id-FACH-Information	ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd	ProtocolIE-ID ::= 123
id-Local-Cell-ID	ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 128
id-AdjustmentPeriod	ProtocolIE-ID ::= 129
id-MaxAdjustmentStep	ProtocolIE-ID ::= 130
id-MaximumTransmissionPower	ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 132
id-MeasurementID	ProtocolIE-ID ::= 133
id-MessageStructure	ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst	ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID	ProtocolIE-ID ::= 143
id-NeighbouringCellMeasurementInformation	ProtocolIE-ID ::= 455
id-P-CCPCH-Information	ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 145
id-P-CPICH-Information	ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 147
id-P-SCH-Information	ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 156

id-PCH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 157
id-PCH-Information	ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 165
id-PICH-Information	ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 168
id-PowerAdjustmentType	ProtocolIE-ID ::= 169
id-PRACH-Information	ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 176
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 189
id-RACH-Information	ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 197
id-ReportCharacteristics	ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD	ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRqst	ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRqstFDD	ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRqstFDD	ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRqst	ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 214
id-RL-InformationList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 215
id-RL-InformationList-RL-SetupRqstFDD	ProtocolIE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady	ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-ReconfRsp	ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 221

id-RL-InformationResponseList-RL-ReconfReady	ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-ReconfRsp	ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 225
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 228
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 229
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure	ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 241
id-RL-Set-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 242
id-S-CCPCH-Information	ProtocolIE-ID ::= 247
id-S-CPICH-Information	ProtocolIE-ID ::= 249
id-SCH-Information	ProtocolIE-ID ::= 251
id-S-SCH-Information	ProtocolIE-ID ::= 253
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD	ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD	ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 264
id-SecondarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate	ProtocolIE-ID ::= 266
id-SFN	ProtocolIE-ID ::= 268
id-ShutdownTimer	ProtocolIE-ID ::= 269
id-Start-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 114
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 270
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 271
id-SyncCase	ProtocolIE-ID ::= 274
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH	ProtocolIE-ID ::= 275
id-T-Cell	ProtocolIE-ID ::= 276
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 277
id-TimeSlotConfigurationList-Cell-SetupRqstTDD	ProtocolIE-ID ::= 278
id-TransmissionDiversityApplied	ProtocolIE-ID ::= 279
id-TypeOfError	ProtocolIE-ID ::= 508
id-UARFCNforNt	ProtocolIE-ID ::= 280
id-UARFCNforNd	ProtocolIE-ID ::= 281
id-UARFCNforNu	ProtocolIE-ID ::= 282
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 284
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 285
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 288
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 289
id-UL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 291
id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 293
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 294
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 295
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 296
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 297

id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD	ProtocolIE-ID ::= 300
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD	ProtocolIE-ID ::= 301
id-USCH-Information-Add	ProtocolIE-ID ::= 302
id-USCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 304
id-USCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 306
id-USCH-InformationResponse	ProtocolIE-ID ::= 309
id-USCH-Information	ProtocolIE-ID ::= 310
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 315
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 316
id-AdjustmentRatio	ProtocolIE-ID ::= 317
id-AP-AICH-Information	ProtocolIE-ID ::= 320
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 323
id-CauseLevel-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 324
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 329
id-CDCA-ICH-Information	ProtocolIE-ID ::= 330
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode	ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag	ProtocolIE-ID ::= 335
id-CPCH-Information	ProtocolIE-ID ::= 336
id-CPCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 342
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count	ProtocolIE-ID ::= 358
id-DPC-Mode	ProtocolIE-ID ::= 450
id-DPCHConstant	ProtocolIE-ID ::= 359
id-DSCH-FDD-Common-Information	ProtocolIE-ID ::= 94
id-EnhancedDSCHPC	ProtocolIE-ID ::= 110
id-EnhancedDSCHPCIndicator	ProtocolIE-ID ::= 111
id-FACH-ParametersList-CTCH-SetupRsp	ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 375
id-PCPCH-Information	ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 380
id-PRACHConstant	ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 383
id-PUSCHConstant	ProtocolIE-ID ::= 384

id-RACH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 385
id-SSDT-CellIDforEDSCHPC	ProtocolIE-ID ::= 443
id-Synchronisation-Configuration-Cell-ReconfRqst	ProtocolIE-ID ::= 393
id-Synchronisation-Configuration-Cell-SetupRqst	ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 398
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 403
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 407
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 408
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 409
id-CommunicationContextInfoItem-Reset	ProtocolIE-ID ::= 412
id-CommunicationControlPortInfoItem-Reset	ProtocolIE-ID ::= 414
id-ResetIndicator	ProtocolIE-ID ::= 416
id-TFCI2-Bearer-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 417
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD	ProtocolIE-ID ::= 418
id-TFCI2-BearerInformationResponse	ProtocolIE-ID ::= 419
id-TimingAdvanceApplied	ProtocolIE-ID ::= 287
id-CFNReportingIndicator	ProtocolIE-ID ::= 6
id-SFNReportingIndicator	ProtocolIE-ID ::= 11
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 12
id-TimeslotISCPInfo	ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 47
id-CauseLevel-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 420
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 421
id-CellAdjustmentInfoItem-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 494
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 482
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 422
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 423
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 424
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 425
id-CellSyncBurstTransInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 426
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 427
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 428
id-CellSyncInfo-CellSyncReprtTDD	ProtocolIE-ID ::= 429
id-CSBTransmissionID	ProtocolIE-ID ::= 430
id-CSBMeasurementID	ProtocolIE-ID ::= 431
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 432
id-NCyclesPerSFNperiod	ProtocolIE-ID ::= 433
id-NRepetitionsPerCyclePeriod	ProtocolIE-ID ::= 434
id-SyncFrameNumber	ProtocolIE-ID ::= 437
id-SynchronisationReportType	ProtocolIE-ID ::= 438
id-SynchronisationReportCharacteristics	ProtocolIE-ID ::= 439

id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 440
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 119
id-ReferenceClockAvailability	ProtocolIE-ID ::= 435
id-ReferenceSFNoffset	ProtocolIE-ID ::= 436
id-InformationExchangeID	ProtocolIE-ID ::= 444
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 445
id-InformationType	ProtocolIE-ID ::= 446
id-InformationReportCharacteristics	ProtocolIE-ID ::= 447
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 448
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 449
id-IPDLParameter-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 451
id-IPDLParameter-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 452
id-IPDLParameter-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 453
id-IPDLParameter-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 454
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 74
id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 75
id-DwPCH-LCR-Information	ProtocolIE-ID ::= 78
id-DwPCH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 80
id-DwPCH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 90
id-DwPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 97
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 99
id-DwPCH-LCR-Information-ResourceStatusInd	ProtocolIE-ID ::= 101
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 154
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 174
id-FPACH-LCR-Information	ProtocolIE-ID ::= 290
id-FPACH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 292
id-FPACH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 22
id-FPACH-LCR-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 311
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 312
id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 313
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 314
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 456
id-PCH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 457
id-PCH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 458
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 459
id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 460
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 461
id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 462
id-RL-InformationResponse-LCR-RL-SetupRspTDD	ProtocolIE-ID ::= 463
id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 464
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 465
id-TimeSlot	ProtocolIE-ID ::= 495
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 466
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 467
id-TimeSlotISCP-LCR-InfoList-RL-SetupRqstTDD	ProtocolIE-ID ::= 468
id-TimeSlotLCR-CM-Rqst	ProtocolIE-ID ::= 469
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 470
id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 471
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 472
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 473
id-TimeSlotISCP-InformationList-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 474
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 475
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 476

id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 477
id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 478
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 479
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD	ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationModify-AddList	ProtocolIE-ID ::= 483
id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 484
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 485
id-UL-SIRTarget	ProtocolIE-ID ::= 510
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 486
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 487
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 488
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 489
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 490
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 491
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 493
id-timeslotInfo-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 496
id-SyncReportType-CellSyncReprtTDD	ProtocolIE-ID ::= 497
id-PUSCH-Info-DM-Rqst	ProtocolIE-ID ::= 505
id-PUSCH-Info-DM-Rsp	ProtocolIE-ID ::= 506
id-PUSCH-Info-DM-Rprt	ProtocolIE-ID ::= 507
id-InitDL-Power	ProtocolIE-ID ::= 509
id-cellSyncBurstRepetitionPeriod	ProtocolIE-ID ::= 511
id-ReportCharacteristicsType-OnModification	ProtocolIE-ID ::= 512
id-SFNFSNMeasurementValueInformation	ProtocolIE-ID ::= 513
id-SFNFSNMeasurementThresholdInformation	ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation	ProtocolIE-ID ::= 515
id-TUTRANGPSMeasurementThresholdInformation	ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 520
id-RL-InformationResponse-LCR-RL-AdditionRspTDD	ProtocolIE-ID ::= 51
id-PDSCH-RL-ID	ProtocolIE-ID ::= 66

END

CHANGE REQUEST

⌘ **25.433 CR 648** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Use of PDSCH RL ID for TDD DSCH/USCH		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May 2002
Category:	⌘ F	Release:	⌘ REL-5
<p>Use <u>one</u> of the following categories:</p> <p>F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p>	

Reason for change:	<p>⌘ DSCH RNTI is a new identifier used in FDD with PDSCH RL ID for DSCH MAC-c/sh multiplexing. CRs for DSCH RNTI were approved at last RAN meeting. Although TDD does not have this particular MAC problem, it does have a similar problem in that the RRC signalling used on the SHCCH to allocate DSCH and USCH needs this same unique identity and thus needs to use PDSCH RL ID. It is therefore proposed to use PDSCH RL ID for TDD DSCH/USCH signalling where needed. PDSCH RL ID which is used in RL SETUP REQUEST and RADIO LINK RECONFIGURATION PREPARE FDD messages is now also added to TDD messages.</p> <p>This proposal aligns TDD to the already approved changes in 25.331.</p>
Summary of change:	<p>⌘ New procedure sections are added in 8.2.17.2 and 8.3.2.2 to indicate TDD use of PDSCH RL ID. Section 9.1.36.2: tabular modification to RADIO LINK SETUP REQUEST. Section 9.1.42.2: tabular modification to RADIO LINK RECONFIGURATION PREPARE. ASN.1 is added.</p>
Consequences if not approved:	<p>⌘ The same problem that was identified and fixed in FDD will not be fixed in TDD. In addition the use of PDSCH RL ID would be misaligned between WG2 and WG3 and the use of PDSCH RL ID would be misaligned between FDD and TDD for this specification.</p> <p>Impact assessment towards the previous version of the specification (same release):</p> <p>This CR has isolated impact with the previous version of the specification (same release) because it affects implementations supporting the corrected functionality,</p>

i.e. TDD DSCH/USCH setup and establishment.

Clauses affected:	⌘	8.2.17.2, 8.3.2.2, 9.1.36.2, 9.1.42.2, 9.3.2, 9.3.4, 9.3.6		
Other specs	⌘	<input checked="" type="checkbox"/> Other core specifications	⌘	TS 25.433 v3.9.0 CR646 TS 25.433 v4.4.0 CR647
affected:		<input type="checkbox"/> Test specifications		
		<input type="checkbox"/> O&M Specifications		
Other comments:	⌘			

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.2.17 Radio Link Setup

8.2.17.1 General

This procedure is used for establishing the necessary resources for a new Node B Communication Context in the Node B.

[FDD – The RL Setup procedure is used to establish one or more radio links. The procedure establishes one or more DCHs on all radio links, and in addition, it can include the establishment of one or more DSCHs or an HS-DSCH on one radio link.]

[TDD – The RL Setup procedure is used for establish one radio link including one or more transport channels. The transport channels can be a mixture of DCHs, DSCHs, and USCHs, or DCHs and an HS-DSCH, including also combinations where one or more transport channel types are not present.]

8.2.17.2 Successful Operation

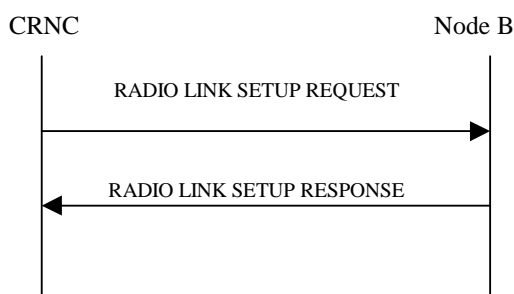


Figure 24: Radio Link Setup procedure, Successful Operation

The procedure is initiated with a RADIO LINK SETUP REQUEST message sent from the CRNC to Node B.

Upon reception of RADIO LINK SETUP REQUEST message, the Node B shall reserve necessary resources and configure the new Radio Link(s) according to the parameters given in the message.

The Node B shall prioritise resource allocation for the RL(s) to be established according to Annex A.

Transport Channels Handling:

DCH(s):

[TDD – If the *DCH Information* IE is present, the Node B shall configure the new DCH(s) according to the parameters given in the message.]

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs then, the Node B shall treat the DCHs in the *DCH Information* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.

[FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]

For a set of co-ordinated DCHs the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD - If no Transport channel BER is

available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected" the Physical channel BER shall be used for the QE, ref. [16].

The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The received *Frame Handling Priority* IE specified for each Transport Channel should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new RL(s) has been activated.

[FDD – The *Diversity Control Field* IE indicates for each RL (except the first RL in the message) whether the Node B shall combine the concerned RL or not. If the *Diversity Control Field* IE is set to "May", then Node B shall decide for either of the alternatives. If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL. Diversity combining is applied to Dedicated Transport Channels (DCH), i.e. it is not applied to the DSCHs. When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with. If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.]

[FDD – In the RADIO LINK SETUP RESPONSE message the Node B shall indicate with the *Diversity Indication* IE whether the RL is combined or not. In case of combining, only the *Reference RL ID* IE shall be included to indicate one of the existing RLs that the concerned RL is combined with. In case of not combining the Node B shall include in the RL SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]

[TDD – The Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]

In case of coordinated DCH, the *Binding ID* IE and the *Transport Layer Address* IE shall be specified for only one of the coordinated DCHs.

DSCH(s):

If the *DSCH Information* IE is present, the Node B shall configure the new DSCH(s) according to the parameters given in the message.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *TFCI2 Bearer Information* IE then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received. The Node B shall manage the time of arrival of these frames according to the values of *ToAWS* and *ToAWE* specified in the IE's. The *Binding ID* IE and *Transport Layer Address* IE for the new bearer to be set up for this purpose shall be returned in the RADIO LINK SETUP RESPONSE message.]

If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *DSCH Information* IE the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the DSCH.

The Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DSCH of this RL.

[TDD – USCH(s)]:

[TDD – If the *USCH Information* IE is present, the Node B shall configure the new USCH(s) according to the parameters given in the message.]

[TDD - If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address IE* and *Binding ID IE* in the *USCH Information IE* the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the USCH.]

[TDD – In case the *USCH Information IE* is present, the Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID IE* and *Transport Layer Address IE* for the transport bearer to be established for each USCH of this RL.]

HS-DSCH(s):

If the *HS-DSCH Information IE* is present the Node B shall configure the new HS-DSCH resources according to the parameters given in the message.

[FDD – If the *HS-DSCH Information IE* and the *HS-PDSCH RL ID IE* are present, the Node B shall configure the new HS-DSCH resources in the radio link specified by the HS-PDSCH RL ID.]

In addition the Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID IE* and *Transport Layer Address IE* for the transport bearers to be established for the HS-DSCH MAC-d flows of this RL.

If the *HS-DSCH-RNTI IE* is present, the Node B shall use the HS-DSCH RNTI value for HS-DSCH processing for the respective Node B Communication Context.

Physical Channels Handling:

[FDD – Compressed Mode]:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information IE*, the Node B shall store the information about the Transmission Gap Pattern Sequences to be used in the Compressed Mode Configuration. This Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[FDD – If the *Downlink compressed mode method IE* in one or more Transmission Gap Pattern Sequence is set to 'SF/2' in the RADIO LINK SETUP REQUEST message, the Node B shall use or not the alternate scrambling code as indicated for each DL Channelisation Code in the *Transmission Gap Pattern Sequence Code Information IE*.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information IE* and the *Active Pattern Sequence Information IE*, the Node B shall use the information to activate the indicated Transmission Gap Pattern Sequence(s) in the new RL. The received *CM Configuration Change CFN* refers to the latest passed CFN with that value. The Node B shall treat the received *TGCFN* IEs as follows:]

- [FDD - If any received *TGCFN IE* has the same value as the received *CM Configuration Change CFN IE*, the Node B shall consider the concerning Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD - If any received *TGCFN IE* does not have the same value as the received *CM Configuration Change CFN IE* but the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN IE* has already passed, the Node B shall consider the concerning Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD - For all other Transmission Gap Pattern Sequences included in the *Active Pattern Sequence Information IE*, the Node B shall activate each Transmission Gap Pattern Sequence at the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN IE* for the Transmission Gap Pattern Sequence.]

[FDD – DL Code Information]:

[FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]

[TDD – PDSCH RL ID]:

[TDD – If the *PDSCH RL ID* IE is included in RADIO LINK SETUP REQUEST message, the Node B shall use the PDSCH RL ID as an identifier for the PDSCH and/or PUSCH in this radio link.]

General:

[FDD – If the *Propagation Delay* IE is included, the Node B may use this information to speed up the detection of L1 synchronisation.]

[FDD – The *UL SIR Target* IE included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control.]

[1.28Mcps TDD – The *UL SIR Target* IE included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control according [19] and [21].]

[FDD – If the received *Limited Power Increase* IE is set to 'Used', the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control.]

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP message indicates that there shall be a hard split on the TFCI field but the *TFCI2 Bearer Information* IE is not included in the message then the Node B shall transmit the TFCI2 field with zero power.]

[FDD - If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information* IE is included in the message then the Node B shall transmit the TFCI2 field with zero power until Synchronization is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer (see ref.[24]).]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Length of TFCI2* IE, then the Node B shall apply the length of TFCI (field 2) indicated in the message.]

[FDD – If the RADIO LINK SETUP REQUEST message does not include the *Length of TFCI2* IE and the *Split type* IE is present with the value "Hard", then the Node B shall assume the length of the TFCI (field 2) is 5 bits.]

Radio Link Handling:**[FDD – Transmit Diversity]:**

[FDD – When *Diversity Mode* IE is "STTD", "Closedloop mode1", or "Closedloop mode2", the Node B shall activate/deactivate the Transmit Diversity to each Radio Link in accordance with *Transmit Diversity Indication* IE]

DL Power Control:

[FDD – The Node B shall start any DL transmission using the initial DL power specified in the message on each DL DPCH of the RL until either UL synchronisation on the U_u is achieved for the RLS or Power Balancing is activated. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) and the power control procedure (see subclause 8.3.7), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message. During compressed mode, the $P_{SIR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]

[FDD - If the *DPC Mode* IE is present in the RADIO LINK SETUP REQUEST message, the Node B shall apply the DPC mode indicated in the message, and be prepared that the DPC mode may be changed during the life time of the RL. If the *DPC Mode* IE is not present in the RADIO LINK SETUP REQUEST message, DPC mode 0 shall be applied (see ref. [10]).]

[TDD – The Node B shall determine the initial CCTrCH DL power for each CCTrCH by the following rule: If the *CCTrCH Initial DL transmission Power* IE is included for that CCTrCH then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL transmission Power* IE included in the *RL Information* IE. The Node B shall start any DL transmission on each CCTrCH using the

initial CCTrCH DL power, as determined above, on each DL DPCH and on each Time Slot of the CCTrCH until the UL synchronisation on the Uu is achieved for the CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3), but shall always be kept within the maximum and minimum limit specified in the RL SETUP REQUEST message.]

[TDD – If the [3.84Mcps TDD - *DL Time Slot ISCPInfo* IE] or [1.28Mcps TDD - *DL Timeslot ISCP LCR* IE] is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged].

[FDD – If the received *Inner Loop DL PC Status* IE is set to "Active", the Node B shall activate the inner loop DL power control for all RLs. If *Inner Loop DL PC Status* IE is set to "Inactive", the Node B shall deactivate the inner loop DL power control for all RLs according to ref. [10]]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *DL Power Balancing Information* IE and the *Power Adjustment Type* IE is set to "Common" or "Individual", the Node B shall activate the power balancing, if activation of power balancing by the RADIO LINK SETUP REQUEST message is supported is supported, according to subclause 8.3.7, using the *DL Power Balancing Information* IE. If the Node B starts the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing shall be set to the indicated DL TX power level (if received) or the decided DL TX power level on each DL channelisation code of a RL.]

[FDD – If activation of power balancing by the RADIO LINK SETUP REQUEST message is supported by the Node B, the Node B shall include the *DL Power Balancing Activation Indicator* IE in the *RL Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

General:

If the RADIO LINK SETUP REQUEST message includes the *RL Specific DCH Information* IE, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the DCH or the set of co-ordinated DCHs.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE and the *S-Field Length* IE, the Node B shall activate SSDT, if supported, using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

[FDD – Irrespective of SSDT activation, the Node B shall include in the RADIO LINK SETUP RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK SETUP REQUEST message requested SSDT activation and the RADIO LINK SETUP RESPONSE message indicates that the SSDT capability is supported for this RL, SSDT is activated in the Node B.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity for EDSCHPC* IE, the Node B shall activate enhanced DSCH power control, if supported, using the *SSDT Cell Identity for EDSCHPC* IE and *SSDT Cell Identity Length* IE as well as *Enhanced DSCH PC* IE in accordance with ref. [10] subclause 5.2.2. If the RADIO LINK SETUP REQUEST message includes both *SSDT Cell Identity* IE and *SSDT Cell Identity for EDSCHPC* IE, then the Node B shall ignore the value in *SSDT Cell Identity for EDSCHPC* IE. If the enhanced DSCH power control is activated and the TFCI power control in DSCH hard split mode is supported, the primary/secondary status determination in the enhanced DSCH power control is also applied to the TFCI power control in DSCH hard split mode.]

[FDD – Radio Link Set Handling]:

[FDD – The *First RLS Indicator* IE indicates if the concerning RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the Node B together with the value of the *DL TPC pattern 01 count* IE which the Node B has received in the Cell Setup procedure, to determine the initial TPC pattern in the DL of the concerning RL and all RLs which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication context.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication context.]

[FDD – The UL out-of-sync algorithm defined in [10] shall for each of the established RL Set(s) use the maximum value of the parameters N_OUTSYNC_IND and T_RLFAILURE, and the minimum value of the parameters N_INSYNC_IND, that are configured in the cells supporting the radio links of the RL Set]

***** UNAFFECTED TEXT *****

8.3.2 Synchronised Radio Link Reconfiguration Preparation

8.3.2.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one UE-UTRAN connection within a Node B.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.2.2 Successful Operation

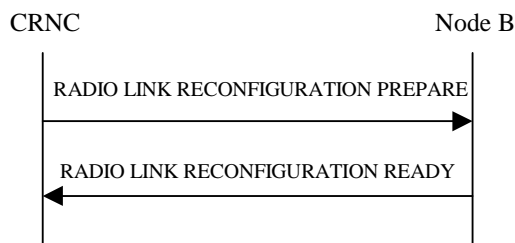


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the CRNC by sending the message RADIO LINK RECONFIGURATION PREPARE to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Modify* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between

different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.

- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the UL of a DCH, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the DL of a DCH, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes multiple *DCH Specific Info* IEs then the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs to Modify* IE includes the *UL FP Mode* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Add* IE includes multiple *DCH specific Info* IEs then, the Node B shall treat the DCHs in the *DCHs to Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD – If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected" the Physical channel BER shall be used for the QE, ref. [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Delete* IEs, the Node B shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of coordinated DCHs are requested to be deleted, the Node B shall not include this set of coordinated DCHs in the new configuration.

Physical Channel Modification:

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *UL DPCH Information* IE then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPDCHs* IE (if it is included) in the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]
- [FDD – If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD – The Node B shall use the *TFCS* IE for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL DPCCH Slot Format* IE, the Node B shall set the new Uplink DPCCH Structure to the new configuration.]
- [FDD - If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the Node B shall apply diversity according to the given value.]
- [FDD – If the *UL DPCH Information* IE includes an *SSDT Cell Identity Length* IE and/or an *S-Field Length* IE, the Node B shall apply the values in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information* IE then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – The Node B shall use the *TFCS* IE for the DL (if it is present) when reserving resources for the downlink of the new configuration. The Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE or the *TFCI Presence* IE, the Node B shall use the information when building TFCIs in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *DL DPCCH Slot Format* IE, group the Node B shall set the new Downlink DPCCH Structure to the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the Node B shall apply the indicated multiplexing type in the new configuration.]

- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to 'Used', the Node B shall, if supported, use Limited Power Increase ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to 'Not Used', the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH code mapping* IE then the Node B shall apply the defined mapping between TFCI values and PDSCH channelisation codes.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH RL ID* IE then the Node B shall infer that the PDSCH for the specified user will be transmitted on the defined radio link.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Modify* or *DL CCTrCH to Modify* IEs, then the Node B shall treat them each as follows:]

- [TDD – If the IE includes any of *TFCS* IE, *TFCI coding* IE or *Puncture Limit* IE the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]
- [TDD – If the IE includes any *UL DPCH to add* or *DL DPCH to add* IEs, the Node B shall include this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH to delete* or *DL DPCH to delete* IEs, the Node B shall remove this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH to modify* or *DL DPCH to modify* IEs, and includes any of *Repetition Period* IE, *Repetition Length* IE, or *TDD DPCH Offset* IE or the message includes UL/DL Timeslot Information and includes any of [*3.84Mcps TDD - Midamble shift and Burst Type* IE, *Time Slot* IE], [*1.28Mcps TDD - Midamble shift LCR* IE, *Time Slot LCR* IE], or *TFCI presence* IE or the message includes UL/DL Code information and includes [*3.84Mcps TDD - TDD Channelisation Code* IE], [*1.28Mcps TDD - TDD Channelisation Code LCR* IE], the Node B shall apply these specified information elements as the new values, otherwise the old values specified for this DPCH configuration are still applicable.]
- [1.28Mcps TDD – If the *UL CCTrCH to Modify* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control according [19] and [21] when the new configuration is being used.]

[TDD – UL/DL CCTrCH Addition]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Add* IE or *DL CCTrCH to Add* IE, the Node B shall include this CCTrCH in the new configuration.]

[TDD – If the *UL/DL CCTrCH to Add* IE includes any *UL/DL DPCH Information* IE, the Node B shall reserve necessary resources for the new configuration of the UL/DL DPCH(s) according to the parameters given in the message.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL CCTrCH to Add* IE, the Node B shall set the TPC step size of that CCTrCH to the same value as the lowest numbered DL CCTrCH in the current configuration.]

[1.28Mcps TDD – The Node B shall use the *UL SIR Target* IE in the *UL CCTrCH to Add* IE as the UL SIR value for the inner loop power control for this CCTrCH according [19] and [21] in the new configuration.]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any UL or DL CCTrCH to be deleted , the Node B shall remove this CCTrCH in the new configuration.]

DL Power Control:

- [FDD - If the *RL Information IE* includes the *DL Reference Power IEs* and the power balancing is active, Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported, at the CFN in the RADIO LINK RECONFIGURATION COMMIT message, according to subclause 8.3.7, using the *DL Reference Power IE*. If the CFN modulo the value of the *Adjustment Period IE* is not equal to 0, the power balancing continues with the old reference power until the end of the current adjustment period, and the updated reference power shall be used from the next adjustment period.

[FDD - If updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator IE* in the *RL Information Response IE* in the RADIO LINK RECONFIGURATION READY message.]

DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH to modify*, *DSCH to add* or *DSCH to delete IEs*, then the Node B shall use this information to add/modify/delete the indicated DSCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address IE* and the *Binding ID IE* for the transport bearer to be established for each DSCH.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Information IE* then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received if one does not already exist or shall apply the new values if such a bearer does already exist. The *Binding ID IE* and *Transport Layer Address IE* of any new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message. If the RADIO LINK RECONFIGURATION PREPARE message specifies that the TFCI2 transport bearer is to be deleted then the Node B shall release the resources associated with that bearer in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Request Indicator IE* in the *TFCI2 Bearer Information IE* with the value "New Bearer Requested", the Node B shall, if supported, establish a new transport bearer replacing the existing transport bearer on which the DSCH TFCI Signaling control frames shall be received. The *Binding ID IE* and *Transport Layer Address IE* of a new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message.]

[FDD – If the *TFCI Signalling Mode IE* within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI field but a TFCI2 transport bearer has not already been set up and *TFCI2 Bearer Information IE* is not included in the message then the Node B shall transmit the TFCI2 field with zero power in the new configuration.]

[FDD – If the *TFCI Signalling Mode IE* within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information IE* is included in the message then the Node B shall transmit the TFCI2 field with zero power until Synchronisation is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer in the new configuration (see ref. [24]).]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Length of TFCI2 IE*, then the Node B shall apply the length of TFCI (field 2) indicated in the message in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Length of TFCI2 IE* and the *Split type IE* is present with the value "Hard", then the Node B shall assume the length of the TFCI (field 2) is 5 bits in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *DSCH Common Information IE*, the Node B shall treat it as follows:]

- [FDD - If the *Enhanced DSCH PC Indicator* IE is included and set to "Enhanced DSCH PC Active in the UE ", the Node B shall activate enhanced DSCH power control in accordance with ref. [10] subclause 5.2.2, if supported, using either:]
 - [FDD - the *SSDT Cell Identity for EDSCHPC* IE in the *RL Information* IE, if the *SSDT Cell Identity* IE is not included in the *RL Information* IE or]
 - [FDD - the *SSDT Cell Identity* IE in the *RL Information* IE, if both the *SSDT Cell Identity* IE and the *SSDT Cell Identity for EDSCHPC* IE are included in the *RL Information* IE.]

[FDD - together with the *SSDT Cell Identity Length* IE in *UL DPCH Information* IE, and *Enhanced DSCH PC* IE, in the new configuration.]

[FDD - If the enhanced DSCH power control is activated and the TFCI power control in DSCH hard split mode is supported, the primary/secondary status determination in the enhanced DSCH power control is also applied to the TFCI power control in DSCH hard split mode.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Enhanced DSCH PC Indicator* IE set to "Enhanced DSCH PC not Active in the UE", the Node B shall deactivate enhanced DSCH power control in the new configuration.]

[TDD – USCH Addition/Modification/Deletion:]

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]
- [TDD – The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each USCH.]

RL Information:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B may activate SSDT using the *SSDT Cell Identity* IE in the new configuration.]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the Node B shall deactivate SSDT in the new configuration.]
- [FDD – If the *RL Information* IE includes a *DL Code Information* IE, the Node B shall apply the values in the new configuration.]
- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- If the *RL Information* IE includes the *Maximum DL Power* and/or the *Minimum DL Power* IEs, the Node B shall apply the values in the new configuration. [FDD - During compressed mode, the $P_{SIR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k .]
- [TDD – If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial CCTrCH DL power for each CCTrCH by the following rule: If the *CCTrCH Initial DL transmission Power* IE is included for that CCTrCH then the Node B shall use that power for the initial CCTrCH DL power, otherwise the

initial CCTrCH DL power is the *Initial DL transmission Power* IE included in the *RL Information* IE. The Node B shall apply the determined initial CCTrCH DL power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu is achieved for the CCTrCH. If no *Initial DL Transmission power* IE is included with a new CCTrCH (even if *CCTrCH Initial DL transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing CCTrCH's when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]

- [FDD- If the *RL Information* IE includes the *DL DPCH Timing Adjustment* IE, the Node B shall adjust the timing of the radio link accordingly in the new configuration.]

[TDD - PDSCH RL ID]

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *PDSCH RL ID* IE then in the new configuration the Node B shall use the PDSCH and/or PUSCH in this radio link.]

Signalling bearer rearrangement:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Signalling Bearer Request Indicator* IE the Node B shall, if supported, allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION READY message.

HS-DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH Information to add* IE or *HS-DSCH Information to delete* IEs or *HS-DSCH Information to modify* IE, then the Node B shall use this information to add/modify/delete the indicated HS-DSCH channel to/from the radio link.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-PDSCH RL ID* IE, then the Node B shall configure the HS-PDSCH in the radio link indicated by this IE, while removing any existing HS-PDSCH resources from other radio links associated with the Node B Communication Context.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH-RNTI* IE, then the Node shall use the HS-DSCH-RNTI for the Node B Communication Context.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH Information to delete* IE requesting the deletion of certain HS-DSCH resources for the Node B Communication Context, the Node B shall remove the indicated HS-DSCH in the new configuration.

General

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address* IE and *Binding ID* IEs in the *DSCHs to Modify*, *DSCHs to Add*, [TDD - *USCHs to Modify*, *USCHs to Add*] or in the *RL Specific DCH Information* IEs, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exist a Prepared Reconfiguration, as defined in subclause 3.1.

In the RADIO LINK RECONFIGURATION READY message, the Node B shall include the *RL Information Response* IE for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the Transport Layer Address and the Binding ID for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In case of a DCH requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* shall be included in the IE *DCH Information Response* IE.

In case of a set of coordinated DCHs requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the DCH in the set of coordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the Node B, the RL Information Response IE shall be included only for one of the combined RLs. The *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

***** UNAFFECTED TEXT *****

9.1.36 RADIO LINK SETUP REQUEST

***** UNAFFECTED TEXT *****

9.1.36.2 TDD message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCTrCH Information		0 to <maxno CCTrCH>			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
> UL SIR Target	O		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD; not applicable for 3.84Mcps TDD	YES	reject
>UL DPCH Information		0..1		For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH Information LCR		0..1		For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
DL CCTrCH Information		0 to <maxno CCTrCH>			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
>TDD TPC DL Step Size	M		9.2.3.21		–	
>TPC CCTrCH List		0 to <maxnoCCTrCH>		List of uplink CCTrCH which provide TPC	–	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
>DL DPCH information		0..1		For 3.84Mcps	YES	notify

				TDD only		
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH information LCR		0..1		For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.4O		–	
>>TSTD Indicator	M		9.2.1.64		–	
>CCTrCH Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore
DCH Information	O		DCH TDD Information 9.2.3.4C		YES	reject
DSCH Information	O		DSCH TDD Information 9.2.3.5A		YES	reject
USCH Information	O		9.2.3.28		YES	reject
RL Information		1			YES	reject
>RL ID	M		9.2.1.53		–	
>C-ID	M		9.2.1.9		–	
>Frame Offset	M		9.2.1.31		–	
>Special Burst Scheduling	M		9.2.3.18A		–	
>Initial DL transmission Power	M		DL Power 9.2.1.21	Initial power on DPCH	–	
>Maximum DL power	M		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL power	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>DL Time Slot ISCP Info	O		9.2.3.4F	For 3.84Mcps TDD only	–	
>DL Time Slot ISCP Info LCR	O		9.2.3.40A	For 1.28Mcps TDD only	YES	reject
>RL specific DCH Information	O		9.2.1.XXX		YES	ignore
>Delayed Activation	O		9.2.1.24C		YES	reject
HS-DSCH Information	O		HS-DSCH TDD Information 9.2.3.5F		YES	reject
HS-DSCH-RNTI	O		INTEGER 9.2.1.31J		YES	reject
HS-PDSCH RL ID	C – InfoHSDSCH		RL ID 9.2.1.53		YES	reject

PDSCH-RL-ID	Q		RL ID 9.2.1.53		YES	ignore
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Range bound	Explanation
MaxnoCCTrCH	Number of CCTrCH for one UE.

***** UNAFFECTED TEXT *****

9.1.42 RADIO LINK RECONFIGURATION PREPARE

***** UNAFFECTED TEXT *****

9.1.42.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCH to Add		0..<maxno of CCHs>			GLOBAL	reject
>CCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
> UL SIR Target	O		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD; not applicable for 3.84Mcps TDD	YES	reject
>UL DPCH Information		0..1		For 3.84Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH Information LCR		0..1		For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
UL CCH to Modify		0..<maxno of CCHs>			GLOBAL	reject
>CCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>TFCI Coding	O		9.2.3.22		–	
>Puncture Limit	O		9.2.1.50		–	
> UL SIR Target	O		UL SIR 9.2.1.67A	For 1.28Mcps TDD only	YES	reject
>UL DPCH to add		0..1		For 3.84Mcps TDD only	YES	reject

>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH to modify		0..1			YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD DPCH Offset	O		9.2.3.19A		–	
>>UL Timeslot Information		0 to <maxno ofULts>		For 3.84Mcps TDD only	–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift and Burst Type	O		9.2.3.7		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>UL Code Information		0 to <maxno OfDPC H>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code	O		9.2.3.19		–	
>>UL Timeslot Information LCR		0 to <Maxno ofULtsL CR>		For 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		–	
>>>Midamble shift LCR	O		9.2.3.7A		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>UL Code Information LCR		0 to <maxno OfDPC HLCR>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code LCR	O		9.2.3.19a		–	
>UL DPCH to delete		0.. <maxno of DPCHs >			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		–	
>UL DPCH to add LCR		0..1		For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
UL CCTrCH to Delete		0.. <maxno of CCTrC Hs>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	

DL CCTrCH to Add		0.. <maxno of CCTrC Hs>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>PunctureLimit	M		9.2.1.50		–	
>TPC CCTrCH List		0 to <maxno CCTrC Hs>		List of uplink CCTrCH which provide TPC	–	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
>DL DPCH Information		0..1		For 3.84Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH Information LCR		0..1		For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.4O		–	
>CCTrCH Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore

DL CCTrCH to Modify		0.. <maxno of CCTrC Hs>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3.		–	
>TFCS	O		9.2.1.58		–	
>TFCI Coding	O		9.2.3.22		–	
>PunctureLimit	O		9.2.1.50		–	
>TPC CCTrCH List		0 to <maxno CCTrC Hs>		List of uplink CCTrCH which provide TPC	–	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
>DL DPCH to add		0..1		For 3.84Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH to modify		0..1			YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD DPCH Offset	O		9.2.3.19A		–	
>>DL Timeslot Information		0 .. <maxno ofDLts>		For 3.84Mcps TDD only	–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift and Burst Type	O		9.2.3.7		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>DL Code Information		0 .. <maxno OfDPC H>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code	O		9.2.3.19		–	
>>DL Timeslot Information LCR		0 .. <Maxno ofDLtsL CR>		For 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		–	
>>>Midamble shift LCR	O		9.2.3.7A		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>DL Code Information LCR		0 .. <maxno OfDPC HLCRs >			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code LCR	O		9.2.3.19a		–	

>DL DPCH to delete		0.. <maxno of DPCHs >			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		–	
>DL DPCH to add LCR		0..1		For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.40		–	
DL CCTrCH to Delete		0.. <maxno of CCTrC Hs>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
DCHs to Modify	O		DCHs TDD to Modify 9.2.3.4D		YES	reject
DCHs to Add	O		DCH TDD Information 9.2.3.4C		YES	reject
DCHs to Delete		0..<max noofDC Hs>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
DSCH Information to modify		0 .. <Maxno of DSCHs >			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
>CCTrCH ID	O		9.2.3.3	DL CCTrCH in which the DSCH is mapped	–	
>Transport Format Set	O		9.2.1.59		–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>Frame Handling Priority	O		9.2.1.30		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	
>Transport Bearer Request Indicator	M		9.2.1.62A		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore

DSCH Information to add	O		DSCH TDD Information 9.2.3.5A		YES	reject
DSCH Information to delete		0 .. <Maxno of DSCHs >			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
USCH Information to modify		0 .. <Maxno of USCHs >			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
>Transport Format Set	O		9.2.1.59		–	
> Allocation/Retention Priority	O		9.2.1.1A		–	
>CCTrCH ID	O		9.2.3.2	UL CCTrCH in which the USCH is mapped	–	
>Transport Bearer Request Indicator	M		9.2.1.62A		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
USCH Information to add	O		USCH Information 9.2.3.28		YES	reject
USCH Information to delete		0 .. <Maxno of USCHs >			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
RL Information		0..1			YES	reject
>RL ID	M		9.2.1.53		–	
>Maximum Downlink Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum Downlink Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>Initial DL transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore
>RL specific DCH Information	O		9.2.1.XXX		YES	ignore
Signalling Bearer Request Indicator	O		9.2.1.55A		YES	reject

HS-DSCH Information to modify	O		9.2.1.31H		YES	reject
HS-DSCH Information to Add	O		HS-DSCH TDD Information 9.2.3.x2		YES	reject
HS-DSCH Information to Delete		0..<Max NoOfMACdFlows>			GLOBAL	reject
> HS-DSCH MAC-D flow ID	M		9.2.1.31I		-	
HS-DSCH-RNTI	O		9.2.1.31J		YES	reject
HS-PDSCH RL ID	O		RL ID 9.2.1.53		YES	reject
<u>PDSCH-RL-ID</u>	<u>O</u>		<u>RL ID 9.2.1.53</u>		<u>YES</u>	<u>ignore</u>

Range Bound	Explanation
<i>MaxnoofDCHs</i>	Maximum number of DCHs for a UE.
<i>MaxnoofCCTrCHs</i>	Maximum number of CCTrCHs for a UE.
<i>MaxnoofDPCHs</i>	Maximum number of DPCHs in one CCTrCH for 3.84Mcps TDD.
<i>MaxnoOfDPCHLCRs</i>	Maximum number of DPCHs in one CCTrCH for 1.28Mcps TDD.
<i>MaxnoofDSCHs</i>	Maximum number of DSCHs for one UE
<i>MaxnoofUSCHs</i>	Maximum number of USCHs for one UE
<i>MaxnoofDLts</i>	Maximum number of Downlink time slots per Radio Link for 3.84Mcps TDD.
<i>MaxnoofDLtsLCR</i>	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.
<i>MaxnoofULts</i>	Maximum number of Uplink time slots per Radio Link for 3.84Mcps TDD.
<i>MaxnoofULtsLCR</i>	Maximum number of Uplink time slots per Radio Link for 1.28Mcps TDD.
<i>MaxNoOfMACdFlows</i>	Maximum number of HS-DSCH MAC-d flows

***** UNAFFECTED TEXT *****

9.3.3 PDU Definitions

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-- *****
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-- PDU definitions for NBAP.
--
-- *****

NBAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
  Active-Pattern-Sequence-Information,
  AddorDeleteIndicator,
  AICH-Power,
  AICH-TransmissionTiming,
  AllocationRetentionPriority,
  APPreambleSignature,
  APSubChannelNumber,
  AvailabilityStatus,
  BCCH-ModificationTime,
  BindingID,
  BlockingPriorityIndicator,
  SCTD-Indicator,
  Cause,
  CCTrCH-ID,
  CDSubChannelNumbers,
  CellParameterID,
  CellSyncBurstAvailabilityIndicator,
  CellSyncBurstCode,
  CellSyncBurstCodeShift,
  CellSyncBurstRepetitionPeriod,
  CellSyncBurstSIR,
  CellSyncBurstTiming,
  CellSyncBurstTimingThreshold,
  CFN,
  Channel-Assignment-Indication,
  ChipOffset,
  C-ID,
  Closedlooptimingadjustmentmode,

```

CommonChannelsCapacityConsumptionLaw,
Compressed-Mode-Deactivation-Flag,
CommonMeasurementAccuracy,
CommonMeasurementType,
CommonMeasurementValue,
CommonMeasurementValueInformation,
CommonPhysicalChannelID,
Common-PhysicalChannel-Status-Information,
Common-TransportChannel-Status-Information,
CommonTransportChannelID,
CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue,
CriticalityDiagnostics,
CPCH-Allowed-Total-Rate,
CPCHScramblingCodeNumber,
CPCH-UL-DPCH-SlotFormat,
CRNC-CommunicationContextID,
CSBMeasurementID,
CSBTransmissionID,
DCH-FDD-Information,
DCH-InformationResponse,
DCH-ID,
FDD-DCHs-to-Modify,
TDD-DCHs-to-Modify,
DCH-TDD-Information,
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DelayedActivation,
DelayedActivationUpdate,
DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-DPCH-TimingAdjustment,
DL-or-Global-CapacityCredit,
DL-Power,
DL-PowerBalancing-Information,
DL-PowerBalancing-ActivationIndicator,
DLPowerAveragingWindowSize,
DL-PowerBalancing-UpdatedIndicator,
DL-ScramblingCode,
DL-TimeslotISCP,
DL-Timeslot-Information,
DL-TimeslotLCR-Information,
DL-TimeslotISCPInfo,
DL-TimeslotISCPInfoLCR,
DL-TPC-Pattern01Count,
DPC-Mode,
DPCH-ID,
DSCH-ID,

DSCH-FDD-Common-Information,
DSCH-FDD-Information,
DSCH-InformationResponse,
DSCH-TDD-Information,
DwPCH-Power,
End-Of-Audit-Sequence-Indicator,
EnhancedDSCHPC,
EnhancedDSCHPCCounter,
EnhancedDSCHPCIndicator,
EnhancedDSCHPCWnd,
EnhancedDSCHPowerOffset,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FPACH-Power,
FrameAdjustmentValue,
FrameHandlingPriority,
FrameOffset,
HS-PDSCH-FDD-Code-Information,
HS-SCCH-ID,
HS-SCCH-FDD-Code-Information,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,
IB-Type,
IndicationType,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
InnerLoopDLPCStatus,
IPDL-FDD-Parameters,
IPDL-TDD-Parameters,
IPDL-Indicator,
LimitedPowerIncrease,
Local-Cell-ID,
MaximumDL-PowerCapability,
Maximum-PDSCH-Power,
MaximumTransmissionPower,
Max-Number-of-PCPCHes,
MaxNrOfUL-DPDCHs,
MaxPRACH-MidambleShifts,
MeasurementFilterCoefficient,
MeasurementID,
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftLCR,
MinimumDL-PowerCapability,
MinSpreadingFactor,
MinUL-ChannelisationCodeLength,

MultiplexingPosition,
NEOT,
NCyclesPerSFNperiod,
NFmax,
NRepetitionsPerCyclePeriod,
N-INSYNC-IND,
N-OUTSYNC-IND,
NeighbouringCellMeasurementInformation,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation,
NodeB-CommunicationContextID,
NStartMessage,
PagingIndicatorLength,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PCP-Length,
PDSCH-CodeMapping,
PDSCHSet-ID,
PDSCH-ID,
PICH-Mode,
PICH-Power,
PowerAdjustmentType,
PowerOffset,
PowerRaiseLimit,
PRACH-Midamble,
PreambleSignatures,
PreambleThreshold,
PredictedSFNSFNDeviationLimit,
PredictedTUTRANGPSDeviationLimit,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
SCH-TimeSlot,
PunctureLimit,
PUSCHSet-ID,
PUSCH-ID,
QE-Selector,
RACH-SlotFormat,
RACH-SubChannelNumbers,
ReferenceClockAvailability,
ReferenceSFNoffset,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
RequestedDataValue,
RequestedDataValueInformation,
ResourceOperationalState,
RL-Set-ID,
RL-ID,
RL-Specific-DCH-Info,
Received-total-wide-band-power-Value,
AdjustmentPeriod,
ScaledAdjustmentRatio,

MaxAdjustmentStep,
RNC-ID,
ScramblingCodeNumber,
SecondaryCCPCH-SlotFormat,
Segment-Type,
S-FieldLength,
SFN,
SFNSFNChangeLimit,
SFNSFNDriftRate,
SFNSFNDriftRateQuality,
SFNSFNQuality,
ShutdownTimer,
SIB-Originator,
SpecialBurstScheduling,
SignallingBearerRequestIndicator,
SSDT-Cell-Identity,
SSDT-CellID-Length,
SSDT-Indication,
Start-Of-Audit-Sequence-Indicator,
STTD-Indicator,
SSDT-SupportIndicator,
SyncCase,
SYNCD1CodeId,
SyncFrameNumber,
SynchronisationReportCharacteristics,
SynchronisationReportType,
T-Cell,
T-RLFAILURE,
TDD-ChannelisationCode,
TDD-ChannelisationCodeLCR,
TDD-DL-Code-LCR-Information,
TDD-DPCHOffset,
TDD-TPC-DownlinkStepSize,
TDD-PhysicalChannelOffset,
TDD-UL-Code-LCR-Information,
TFCI2-BearerInformationResponse,
TFCI2BearerRequestIndicator,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TFCS,
TimeSlot,
TimeSlotLCR,
TimeSlotDirection,
TimeSlotStatus,
TimingAdjustmentValue,
TimingAdvanceApplied,
ToAWE,
ToAWS,
TransmissionDiversityApplied,
TransmitDiversityIndicator,
TransmissionGapPatternSequenceCodeInformation,

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Transmission-Gap-Pattern-Sequence-Information,
TransportBearerRequestIndicator,
TransportFormatSet,
TransportLayerAddress,
TSTD-Indicator,
TUTRANGPS,
TUTRANGPSChangeLimit,
TUTRANGPSDriftRate,
TUTRANGPSDriftRateQuality,
TUTRANGPSQuality,
UARFCN,
UC-Id,
USCH-Information,
USCH-InformationResponse,
UL-CapacityCredit,
UL-DPCCH-SlotFormat,
UL-SIR,
UL-FP-Mode,
UL-PhysCH-SF-Variation,
UL-ScramblingCode,
UL-Timeslot-Information,
UL-TimeslotLCR-Information,
UL-TimeSlot-ISCP-Info,
UL-TimeSlot-ISCP-LCR-Info,
UL-TimeslotISCP-Value,
UL-TimeslotISCP-Value-IncrDecrThres,
USCH-ID,
HSDSCH-FDD-Information,
HSDSCH-FDD-Information-Response,
HSDSCH-Information-to-Modify,
HSDSCH-MACdFlow-ID,
HSDSCH-RNTI,
HSDSCH-TDD-Information,
HSDSCH-TDD-Information-Response,
PrimaryCCPCH-RSCP
FROM NBAP-IEs

PrivateIE-Container{},
ProtocolExtensionContainer{},
ProtocolIE-Container{},
ProtocolIE-Single-Container{},
ProtocolIE-ContainerList{},
NBAP-PRIVATE-IES,
NBAP-PROTOCOL-IES,
NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers

id-Active-Pattern-Sequence-Information,
id-AdjustmentRatio,
id-AICH-Information,
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-AP-AICH-Information,
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,

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id-BCH-Information,
id-BCCH-ModificationTime,
id-bindingID,
id-BlockingPriorityIndicator,
id-Cause,
id-CauseLevel-PSCH-ReconfFailureTDD,
id-CauseLevel-RL-AdditionFailureFDD,
id-CauseLevel-RL-AdditionFailureTDD,
id-CauseLevel-RL-ReconfFailure,
id-CauseLevel-RL-SetupFailureFDD,
id-CauseLevel-RL-SetupFailureTDD,
id-CauseLevel-SyncAdjustmntFailureTDD,
id-CCP-InformationItem-AuditRsp,
id-CCP-InformationList-AuditRsp,
id-CCP-InformationItem-ResourceStatusInd,
id-CCTrCH-InformationItem-RL-FailureInd,
id-CCTrCH-InformationItem-RL-RestoreInd,
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD,
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD,
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD,
id-CDCA-ICH-Information,
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD,
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD,
id-Cell-InformationItem-AuditRsp,
id-Cell-InformationItem-ResourceStatusInd,
id-Cell-InformationList-AuditRsp,
id-CellParameterID,
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD,
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD,
id-cellSyncBurstRepetitionPeriod,
id-CellSyncBurstTransReconf-CellSyncReconfRqstTDD,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD,
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD,
id-CellSyncInfo-CellSyncReprtTDD,
id-CFN,
id-CFNReportingIndicator,
id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD,
id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID,
id-CommunicationControlPortInfoItem-Reset,

id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-CPCH-Information,
id-CPCH-Parameters-CTCH-SetupRsp,
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-CSBTransmissionID,
id-CSBMeasurementID,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,
id-DCH-RearrangeList-Bearer-RearrangeInd,
id-DSCH-RearrangeList-Bearer-RearrangeInd,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DelayedActivation,
id-DelayedActivationList-RL-ActivationCmdFDD,
id-DelayedActivationList-RL-ActivationCmdTDD,
id-DelayedActivationInformation-RL-ActivationCmdFDD,
id-DelayedActivationInformation-RL-ActivationCmdTDD,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-TimingAdjustment,
id-DL-PowerBalancing-Information,

id-DL-PowerBalancing-ActivationIndicator,
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,
id-DL-PowerBalancing-UpdatedIndicator,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-TPC-Pattern01Count,
id-DPC-Mode,
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteList-RL-ReconfPrepFDD,
id-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-FDD-Common-Information,
id-DSCH-TDD-Information,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-End-Of-Audit-Sequence-Indicator,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator,
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRqstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstTDD,
id-IndicationType-ResourceStatusInd,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rqst,
id-InformationExchangeObjectType-InfEx-Rsp,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationReportCharacteristics,
id-InformationType,
id-InitDL-Power,
id-InnerLoopDLPCStatus,
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
id-IPDLParameter-Information-Cell-ReconfRqstFDD,
id-IPDLParameter-Information-Cell-SetupRqstFDD,
id-IPDLParameter-Information-Cell-ReconfRqstTDD,
id-IPDLParameter-Information-Cell-SetupRqstTDD,
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
id-Limited-power-increase-information-Cell-SetupRqstFDD,
id-Local-Cell-ID,
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp,
id-Local-Cell-InformationItem-ResourceStatusInd,

id-Local-Cell-InformationItem2-ResourceStatusInd,
id-Local-Cell-InformationList-AuditRsp,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MaximumTransmissionPower,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,
id-NCyclesPerSFNperiod,
id-NeighbouringCellMeasurementInformation,
id-NodeB-CommunicationContextID,
id-NRepetitionsPerCyclePeriod,
id-P-CCPCH-Information,
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRqstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRqstTDD,
id-PCH-Parameters-CTCH-SetupRsp,
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstTDD,
id-PCH-Information,
id-PCPCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRqstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PDSCH-Information-Cell-SetupRqstFDD,
id-PDSCH-Information-Cell-ReconfRqstFDD,
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PDSCH-RL-ID,
id-PDSCHSets-AddList-PSCH-ReconfRqst,
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRqstTDD,
id-PICH-ParametersItem-CTCH-SetupRqstTDD,
id-PowerAdjustmentType,
id-Power-Local-Cell-Group-InformationItem-AuditRsp,
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList-AuditRsp,
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd,
id-Power-Local-Cell-Group-ID,
id-PRACH-Information,
id-PRACHConstant,
id-PRACH-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRqstFDD,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,

id-PrimarySCH-Information-Cell-SetupRqstFDD,
id-PrimaryScramblingCode,
id-SCH-Information-Cell-ReconfRqstTDD,
id-SCH-Information-Cell-SetupRqstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PUSCHConstant,
id-PUSCHSets-AddList-PSCH-ReconfRqst,
id-PUSCHSets-DeleteList-PSCH-ReconfRqst,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,
id-RACH-ParametersItem-CTCH-SetupRqstFDD,
id-RACH-ParameterItem-CTCH-SetupRqstTDD,
id-ReferenceClockAvailability,
id-ReferenceSFNOffset,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRqstFDD,
id-RL-informationItem-RL-DeletionRqst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
id-RL-InformationItem-RL-RestoreInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-informationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRqstFDD,
id-RL-InformationList-RL-SetupRqstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-ReconfRqstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,

id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-RL-Specific-DCH-Info,
id-S-CCPCH-Information,
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-SecondarySCH-Information-Cell-ReconfRqstFDD,
id-SecondarySCH-Information-Cell-SetupRqstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-SignallingBearerRequestIndicator,
id-SSDT-CellIDforEDSCHPC,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH,
id-SyncFrameNumber,
id-SynchronisationReportType,
id-SynchronisationReportCharacteristics,
id-SyncReportType-CellSyncReprtTDD,
id-T-Cell,
id-TargetCommunicationControlPortID,
id-TFCI2-Bearer-Information-RL-SetupRqstFDD,
id-TFCI2-BearerInformationResponse,
id-TFCI2BearerRequestIndicator,
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-timeslotInfo-CellSyncInitiationRqstTDD,
id-TimeslotISCPInfo,
id-TimingAdvanceApplied,
id-TransmissionDiversityApplied,
id-transportlayeraddress,
id-UARFCNforNt,
id-UARFCNforNd,
id-UARFCNforNu,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,

id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-UL-DPCH-InformationList-RL-SetupRqstTDD,
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD,
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,
id-USCH-Information-Add,
id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
id-USCH-InformationResponse,
id-USCH-Information,
id-USCH-RearrangeList-Bearer-RearrangeInd,
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD,
id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD,
id-DwPCH-LCR-Information,
id-DwPCH-LCR-Information-AuditRsp,
id-DwPCH-LCR-InformationList-AuditRsp,
id-DwPCH-LCR-Information-Cell-SetupRqstTDD,
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD,
id-DwPCH-LCR-Information-ResourceStatusInd,
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD,
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD,
id-FPACH-LCR-Information,
id-FPACH-LCR-Information-AuditRsp,
id-FPACH-LCR-InformationList-AuditRsp,
id-FPACH-LCR-InformationList-ResourceStatusInd,
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD,
id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD,
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD,
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-ReconfRqstTDD,
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD,
id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD,

id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD,
id-RL-InformationResponse-LCR-RL-SetupRspTDD,
id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD,
id-TimeSlot,
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD,
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD,
id-TimeSlotLCR-CM-Rqst,
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD,
id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD,
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD,
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD,
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-LCR-InformationModify-AddList,
id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD,
id-UL-SIRTarget,
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-Info-DM-Rqst,
id-PUSCH-Info-DM-Rsp,
id-PUSCH-Info-DM-Rprt,
id-RL-InformationResponse-LCR-RL-AdditionRspTDD,
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD,
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD,
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst,
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst,
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst,
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst,
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst,
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-neighbouringTDDCellMeasurementInformationLCR,
id-SYNCD1CodeId-TransInitLCR-CellSyncInitiationRqstTDD,
id-SYNCD1CodeId-MeasureInitLCR-CellSyncInitiationRqstTDD,
id-SYNCD1CodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD,
id-SYNCD1CodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD,
id-SYNCD1CodeIdMeasInfoList-CellSyncReconfRqstTDD,

id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD,
id-SyncDLCodeIdThreInfoLCR,
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD,
id-DwPCH-Power,
id-Angle-Of-Arrival-Value-LCR,
id-HSDSCH-FDD-Information,
id-HSDSCH-FDD-Information-Response,
id-HSDSCH-FDD-Information-to-Add,
id-HSDSCH-FDD-Information-to-Delete,
id-HSDSCH-Information-to-Modify,
id-HSDSCH-RNTI,
id-HSDSCH-TDD-Information,
id-HSDSCH-TDD-Information-Response,
id-HSDSCH-TDD-Information-Response-LCR,
id-HSDSCH-TDD-Information-to-Add,
id-HSDSCH-TDD-Information-to-Delete,
id-HSPDSCH-RL-ID,
id-PrimCCPCH-RSCP-DL-PC-RqstTDD,

maxNrOfCCTrCHs,
maxNrOfCellSyncBursts,
maxNrOfCodes,
maxNrOfCPCHs,
maxNrOfDCHs,
maxNrOfDLTSs,
maxNrOfDLTSLCRs,
maxNrOfDPCHs,
maxNrOfDSCHs,
maxNrOfFACHs,
maxNrOfRLs,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfRLSets,
maxNrOfPCPCHs,
maxNrOfPDSCHs,
maxNrOfPUSCHs,
maxNrOfPRACHLCRs,
maxNrOfPDSCHSets,
maxNrOfPUSCHSets,
maxNrOfReceptsPerSyncFrame,
maxNrOfSCCPCHs,
maxNrOfSCCPCHLCRs,
maxNrOfULTSs,
maxNrOfULTSLCRs,
maxNrOfUSCHs,
maxAPSigNum,
maxCPCHCell,
maxFACHCell,
maxFPACHCell,
maxNoofLen,
maxRACHCell,
maxPCPCHCell,
maxPRACHCell,

```

maxSCCPCHCell,
maxSCPICHCell,
maxCellinNodeB,
maxCCPinNodeB,
maxCommunicationContext,
maxLocalCellinNodeB,
maxNrOfSlotFormatsPRACH,
maxNrOfCellSyncBursts,
maxNrOfReceptsPerSyncFrame,
maxIB,
maxIBSEG,
maxNrOfHSSCCHs,
maxNoOfSyncFramesLCR,
maxNrofreceptionsperSyncFrameLCR,
maxNrOfMACdFlows
FROM NBAP-Constants;

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK SETUP REQUEST TDD
--
-- *****

```

```

RadioLinkSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY reject          TYPE          CRNC-CommunicationContextID
      PRESENCE mandatory }|
    { ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD          CRITICALITY notify          TYPE          UL-CCTrCH-InformationList-RL-
SetupRqstTDD          PRESENCE optional }|
    { ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD          CRITICALITY notify          TYPE          DL-CCTrCH-InformationList-RL-
SetupRqstTDD          PRESENCE optional }|
    { ID id-DCH-TDD-Information          CRITICALITY reject          TYPE          DCH-TDD-Information          PRESENCE optional }|
    { ID id-DSCH-TDD-Information          CRITICALITY reject          TYPE          DSCH-TDD-Information          PRESENCE optional }|
    { ID id-USCH-Information          CRITICALITY reject          TYPE          USCH-Information          PRESENCE optional }|
    { ID id-RL-Information-RL-SetupRqstTDD          CRITICALITY reject          TYPE          RL-Information-RL-SetupRqstTDD
      PRESENCE mandatory },
    ...
}

RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-TDD-Information          CRITICALITY reject          EXTENSION HSDSCH-TDD-Information          PRESENCE optional }|
    { ID id-HSDSCH-RNTI          CRITICALITY reject          EXTENSION HSDSCH-RNTI          PRESENCE optional }|
    { ID id-HSPDSCH-RL-ID          CRITICALITY reject          EXTENSION RL-ID          PRESENCE conditional },
    { ID id-PDSCH-RL-ID          CRITICALITY ignore          EXTENSION RL-ID          PRESENCE optional },
    ..
}

```

```

}

UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
  ProtocolIE-Single-Container{{ UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD      CRITICALITY   notify           TYPE           UL-CCTrCH-InformationItem-RL-
  SetupRqstTDD      PRESENCE     mandatory}
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  tFCS              TFCS,
  tFCI-Coding       TFCI-Coding,
  punctureLimit     PunctureLimit,
  uL-DPCH-Information UL-DPCH-Information-RL-SetupRqstTDD OPTIONAL, -- For 3.84Mcps TDD only
  iE-Extensions     ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify EXTENSION UL-DPCH-LCR-Information-RL-SetupRqstTDD PRESENCE optional
  } | -- For 1.28Mcps TDD only
  { ID id-UL-SIRTarget CRITICALITY reject EXTENSION UL-SIR PRESENCE optional },
  -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
  ...
}

UL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationList-RL-SetupRqstTDD      CRITICALITY notify TYPE UL-DPCH-InformationItem-RL-SetupRqstTDD      PRESENCE mandatory }
}

UL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  uL-Timeslot-Information UL-Timeslot-Information,
  iE-Extensions         ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD      CRITICALITY notify TYPE UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD      PRESENCE
  optional }
}

```

```

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    uL-TimeslotLCR-Information  UL-TimeslotLCR-Information,
    iE-Extensions         ProtocolExtensionContainer { { UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container{{ DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationItem-RL-SetupRqstTDD PRESENCE mandatory}
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS               TFCS,
    tFCI-Coding        TFCI-Coding,
    punctureLimit      PunctureLimit,
    tdd-TPC-DownlinkStepSize  TDD-TPC-DownlinkStepSize,
    cCTrCH-TPCList     CCTrCH-TPCList-RL-SetupRqstTDD OPTIONAL,
    dL-DPCH-Information  DL-DPCH-Information-RL-SetupRqstTDD OPTIONAL, -- For 3.84Mcps TDD only
    iE-Extensions      ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify EXTENSION DL-DPCH-LCR-Information-RL-SetupRqstTDD PRESENCE optional } | -- For 1.28Mcps TDD only
    { ID id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional },
    ...
}

CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD

CCTrCH-TPCItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    iE-Extensions      ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationList-RL-SetupRqstTDD      CRITICALITY notify  TYPE DL-DPCH-InformationItem-RL-SetupRqstTDD      PRESENCE mandatory  }
}

DL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  dL-Timeslot-Information    DL-Timeslot-Information,
  iE-Extensions              ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD      CRITICALITY notify  TYPE DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD      PRESENCE
mandatory  }
}

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  dL-TimeslotLCR-Information DL-TimeslotLCR-Information,
  tstdIndicator              TSTD-Indicator,
  iE-Extensions              ProtocolExtensionContainer { { DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
  rL-ID                      RL-ID,
  c-ID                        C-ID,
  frameOffset                 FrameOffset,
  specialBurstScheduling      SpecialBurstScheduling,
  initialDL-transmissionPower DL-Power,
  maximumDL-power             DL-Power,
  minimumDL-power             DL-Power,
  dL-TimeSlotISCPInfo         DL-TimeSlotISCPInfo OPTIONAL, -- For 3.84Mcps TDD only
  iE-Extensions              ProtocolExtensionContainer { { RL-Information-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

```

```

RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD CRITICALITY reject EXTENSION TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD PRESENCE
optional } | -- For 1.28Mcps TDD only
  { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional } |
  { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional },
  ...
}

TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD ::= SEQUENCE {
  dL-TimeslotISCP-LCR-Info DL-TimeslotISCPInfoLCR,
  iE-Extensions ProtocolExtensionContainer { {TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
    
```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE TDD
--
-- *****
    
```

```

RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkReconfigurationPrepareTDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}} OPTIONAL,
  ...
}
    
```

```

RadioLinkReconfigurationPrepareTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID CRITICALITY reject TYPE NodeB-CommunicationContextID
  PRESENCE mandatory } |
  { ID id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-CCTrCH-
InformationAddList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-CCTrCH-
InformationModifyList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-CCTrCH-
InformationDeleteList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-CCTrCH-
InformationAddList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-CCTrCH-
InformationModifyList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-CCTrCH-
InformationDeleteList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-TDD-DCHs-to-Modify CRITICALITY reject TYPE TDD-DCHs-to-Modify PRESENCE optional } |
  { ID id-DCHs-to-Add-TDD CRITICALITY reject TYPE DCH-TDD-Information PRESENCE optional } |
}
    
```

```

    { ID id-DCH-DeleteList-RL-ReconfPrepTDD
      PRESENCE optional } |
    { ID id-DSCH-Information-ModifyList-RL-ReconfPrepTDD
      PRESENCE optional } |
    { ID id-DSCHs-to-Add-TDD CRITICALITY reject TYPE DSCH-TDD-Information PRESENCE optional } |
    { ID id-DSCH-Information-DeleteList-RL-ReconfPrepTDD
      PRESENCE optional } |
    { ID id-USCH-Information-ModifyList-RL-ReconfPrepTDD
      PRESENCE optional } |
    { ID id-USCH-Information-Add CRITICALITY reject TYPE USCH-Information PRESENCE optional } |
    { ID id-USCH-Information-DeleteList-RL-ReconfPrepTDD
      PRESENCE optional } |
    { ID id-RL-Information-RL-ReconfPrepTDD
      PRESENCE optional },
    ...
}

```

```

RadioLinkReconfigurationPrepareTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-SignallingBearerRequestIndicator CRITICALITY reject EXTENSION SignallingBearerRequestIndicator PRESENCE optional } |
  { ID id-HSDSCH-Information-to-Modify CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify PRESENCE optional } |
  { ID id-HSDSCH-TDD-Information-to-Add CRITICALITY reject EXTENSION HSDSCH-TDD-Information PRESENCE optional } |
  { ID id-HSDSCH-TDD-Information-to-Delete CRITICALITY reject EXTENSION HSDSCH-DeleteList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-HSDSCH-RNTI CRITICALITY reject EXTENSION HSDSCH-RNTI PRESENCE optional } |
  { ID id-HSPDSCH-RL-ID CRITICALITY reject EXTENSION RL-ID PRESENCE optional },
  { ID id-PDSCH-RL-ID CRITICALITY ignore EXTENSION RL-ID PRESENCE optional },
  ...
}

```

```

UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

```

```

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID CCTrCH-ID,
  tFCS TFCS,
  tFCI-Coding TFCI-Coding,
  punctureLimit PunctureLimit,
  ul-DPCH-InformationList UL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
  ...
}

```

```

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-DPCH-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional } | -- For 3.84Mcps TDD only
  { ID id-UL-SIRTarget CRITICALITY reject EXTENSION UL-SIR PRESENCE optional },
  -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
  ...
}

```

```

UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD } }

```

```

UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationAddItem-RL-ReconfPrepTDD PRESENCE
    mandatory }
}

```

```

}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    uL-Timeslot-Information    UL-Timeslot-Information,
    iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
    ...
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD }}

UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD  CRITICALITY reject      TYPE UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
    PRESENCE mandatory }    -- For 1.28Mcps TDD only
}

UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    uL-Timeslot-InformationLCR UL-TimeslotLCR-Information,
    iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
    ...
}

UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                  CCTrCH-ID,
    tFCS                        TFCS                                OPTIONAL,
    tFCI-Coding                 TFCI-Coding                            OPTIONAL,
    punctureLimit                PunctureLimit                        OPTIONAL,
    ul-DPCH-InformationAddList    UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD    OPTIONAL,
    ul-DPCH-InformationModifyList UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD    OPTIONAL,
    ul-DPCH-InformationDeleteList UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD    OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-InformationModify-AddList  CRITICALITY reject      EXTENSION      UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
    PRESENCE optional }|    -- For 1.28Mcps TDD only
}

```



```

    { ID id-UL-SIRTarget          CRITICALITY reject      EXTENSION      UL-SIR      PRESENCE optional      },
    -- This IE shall be applicable for 1.28Mcps TDD only.
    ...
}

UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}

UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD  CRITICALITY reject      TYPE UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
  PRESENCE mandatory }
}

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset           TDD-DPCHOffset,
  uL-Timeslot-Information   UL-Timeslot-Information,
  iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD
}}

UL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD  CRITICALITY reject      TYPE UL-DPCH-LCR-InformationModify-AddItem-RL-
ReconfPrepTDD      PRESENCE mandatory }
}

UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset           TDD-DPCHOffset,
  uL-Timeslot-InformationLCR  UL-TimeslotLCR-Information,
  iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD }}

UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD  CRITICALITY reject      TYPE UL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD      PRESENCE mandatory }
}

```

```

}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod    OPTIONAL,
    repetitionLength          RepetitionLength    OPTIONAL,
    tdd-DPCHOffset            TDD-DPCHOffset      OPTIONAL,
    uL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD  UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD    OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD    CRITICALITY reject    EXTENSION    UL-TimeslotLCR-InformationModify-ModifyList-RL-
    ReconfPrepTDD    PRESENCE optional }, -- For 1.28Mcps TDD only
    ...
}

UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD -- For 3.84Mcps TDD only

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlot                  TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType    OPTIONAL,
    tFCI-Presence              TFCI-Presence    OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD  UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD    OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                    DPCH-ID,
    tdd-ChannelisationCode      TDD-ChannelisationCode    OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeslotLCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfPrepTDD -- For 1.28Mcps TDD only
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,

```

```

midambleShiftLCR                MidambleShiftLCR                OPTIONAL,
tFCI-Presence                    TFCI-Presence                OPTIONAL,
UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLRCR  UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLRCR  OPTIONAL,
iE-Extensions                    ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
OPTIONAL,
...
}

UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLRCR ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR ::= SEQUENCE {
dPCH-ID                          DPCH-ID,
tdd-ChannelisationCodeLCR        TDD-ChannelisationCodeLCR    OPTIONAL,
iE-Extensions                    ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR-ExtIEs } }
OPTIONAL,
...
}

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
{ ID id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD    CRITICALITY reject          TYPE UL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD              PRESENCE mandatory }
}

UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
dPCH-ID                          DPCH-ID,
iE-Extensions                    ProtocolExtensionContainer { { UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
OPTIONAL,
...
}

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
cCTrCH-ID                        CCTrCH-ID,

```

```

    iE-Extensions          ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID              CCTrCH-ID,
    tFCS                   TFCS,
    tFCI-Coding            TFCI-Coding,
    punctureLimit          PunctureLimit,
    cCTrCH-TPCList         CCTrCH-TPCAddList-RL-ReconfPrepTDD                                OPTIONAL,
    dl-DPCH-InformationList DL-DPCH-InformationAddList-RL-ReconfPrepTDD                OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-InformationAddList-RL-ReconfPrepTDD  CRITICALITY reject          EXTENSION          DL-DPCH-InformationAddList-RL-ReconfPrepTDD  PRESENCE optional } | -- For 1.28Mcps TDD only
    { ID id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD     CRITICALITY ignore          EXTENSION DL-Power          PRESENCE optional },
    ...
}

CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD -- For 3.84Mcps TDD only

CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID              CCTrCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs} }    OPTIONAL,
    ...
}

CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD } }

DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-InformationAddItem-RL-ReconfPrepTDD  PRESENCE
mandatory }
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
}

```

```

    dl-Timeslot-Information          DL-Timeslot-Information,
    iE-Extensions                    ProtocolExtensionContainer { { DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD } }

DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
    PRESENCE mandatory } -- For 1.28Mcps TDD only
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    dl-Timeslot-InformationLCR DL-TimeslotLCR-Information,
    iE-Extensions              ProtocolExtensionContainer { { DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS                TFCS                                OPTIONAL,
    tFCI-Coding         TFCI-Coding                          OPTIONAL,
    punctureLimit       PunctureLimit                       OPTIONAL,
    cCTrCH-TPCList      CCTrCH-TPCModifyList-RL-ReconfPrepTDD  OPTIONAL,
    dl-DPCH-InformationAddList  DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD  OPTIONAL,
    dl-DPCH-InformationModifyList  DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
    dl-DPCH-InformationDeleteList  DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD  OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
    { ID id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD  CRITICALITY reject          EXTENSION          DL-DPCH-LCR-InformationModify-
    AddList-RL-ReconfPrepTDD          PRESENCE optional }
}

CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD

```

```

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID
    iE-Extensions
    ...
    ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
}

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }} --
For 3.84Mcps TDD only

DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
    PRESENCE mandatory } -- For 1.28Mcps TDD only
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod RepetitionPeriod,
    repetitionLength RepetitionLength,
    tdd-DPCHOffset TDD-DPCHOffset,
    dL-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions ProtocolExtensionContainer { { DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD
}}

DL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-LCR-InformationModify-AddItem-RL-
ReconfPrepTDD PRESENCE mandatory }
}

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod RepetitionPeriod,
    repetitionLength RepetitionLength,
    tdd-DPCHOffset TDD-DPCHOffset,
    dL-Timeslot-InformationLCR DL-TimeslotLCR-Information,
    iE-Extensions ProtocolExtensionContainer { { DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD } }

DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD   CRITICALITY reject           TYPE DL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD           PRESENCE mandatory }
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod           RepetitionPeriod           OPTIONAL,
  repetitionLength           RepetitionLength           OPTIONAL,
  tdd-DPCHOffset             TDD-DPCHOffset           OPTIONAL,
  dL-Timeslot-InformationAddModify-ModifyList-RL-ReconfPrepTDD     DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD     OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD   CRITICALITY reject           EXTENSION           DL-Timeslot-
LCR-InformationModify-ModifyList-RL-ReconfPrepTDD           PRESENCE optional },
  ...
}

DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  timeSlot                   TimeSlot,
  midambleShiftAndBurstType  MidambleShiftAndBurstType           OPTIONAL,
  tFCI-Presence              TFCI-Presence           OPTIONAL,
  dL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD     DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD     OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dPCH-ID                    DPCH-ID,
  tdd-ChannelisationCode     TDD-ChannelisationCode           OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD

```
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR          OPTIONAL,
    tFCI-Presence              TFCI-Presence            OPTIONAL,
    dL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}
```

```
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

```
DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                    DPCH-ID,
    tdd-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR          OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}
```

```
DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD } }

```
DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-DeleteListIE-RL-
    ReconfPrepTDD PRESENCE mandatory }
}
```

DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD

```
DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                    DPCH-ID,
    iE-Extensions              ProtocolExtensionContainer { { DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}
```

```
DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD


```

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD

DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-ModifyItem-RL-ReconfPrepTDD

DSCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    cCTrCH-ID                CCTrCH-ID                OPTIONAL,
    transportFormatSet      TransportFormatSet        OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority    FrameHandlingPriority  OPTIONAL,
    toAWS                    ToAWS                    OPTIONAL,
    toAWE                    ToAWE                    OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    iE-Extensions            ProtocolExtensionContainer { { DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
    ...
}

DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID          CRITICALITY ignore     EXTENSION BindingID          PRESENCE          optional }|
    { ID id-transportlayeraddress CRITICALITY ignore     EXTENSION TransportLayerAddress PRESENCE          optional },
    ...
}

DSCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-DeleteItem-RL-ReconfPrepTDD

DSCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
    ...
}

```

```

DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

USCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-ModifyItem-RL-ReconfPrepTDD

USCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  uSCH-ID                USCH-ID,
  transportFormatSet     TransportFormatSet      OPTIONAL,
  allocationRetentionPriority  AllocationRetentionPriority  OPTIONAL,
  cCTrCH-ID              CCTrCH-ID              OPTIONAL,
  transportBearerRequestIndicator  TransportBearerRequestIndicator,
  iE-Extensions          ProtocolExtensionContainer { { USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }  OPTIONAL,
  ...
}

USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-bindingID          CRITICALITY ignore      EXTENSION  BindingID          PRESENCE          optional }|
  { ID id-transportlayeraddress  CRITICALITY ignore      EXTENSION  TransportLayerAddress  PRESENCE          optional },
  ...
}

USCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-DeleteItem-RL-ReconfPrepTDD

USCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  uSCH-ID                USCH-ID,
  iE-Extensions          ProtocolExtensionContainer { { USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }  OPTIONAL,
  ...
}

USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Information-RL-ReconfPrepTDD ::= SEQUENCE {
  rL-ID                RL-ID,
  maxDL-Power          DL-Power          OPTIONAL,
  minDL-Power          DL-Power          OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { { RL-Information-RL-ReconfPrepTDD-ExtIEs} }  OPTIONAL,
  ...
}

RL-Information-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-InitDL-Power      CRITICALITY ignore      EXTENSION  DL-Power          PRESENCE optional }|
  { ID id-RL-Specific-DCH-Info  CRITICALITY ignore      EXTENSION  RL-Specific-DCH-Info  PRESENCE optional },
  ...
}

HSDSCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-DeleteItem-RL-ReconfPrepTDD

HSDSCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  hsDSCH-MACdFlow-ID          HSDSCH-MACdFlow-ID,

```

```

    iE-Extensions
    ...
}
HSDSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- IEs
--
-- *****

id-AICH-Information                ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd  ProtocolIE-ID ::= 1
id-BCH-Information                ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd  ProtocolIE-ID ::= 8
id-BCCH-ModificationTime          ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator       ProtocolIE-ID ::= 10
id-Cause                           ProtocolIE-ID ::= 13
id-CCP-InformationItem-AuditRsp    ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp    ProtocolIE-ID ::= 15
id-CCP-InformationItem-ResourceStatusInd  ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp    ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd  ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp    ProtocolIE-ID ::= 19
id-CellParameterID                ProtocolIE-ID ::= 23
id-CFN                              ProtocolIE-ID ::= 24
id-C-ID                             ProtocolIE-ID ::= 25
id-CommonMeasurementAccuracy       ProtocolIE-ID ::= 39
id-CommonMeasurementObjectType-CM-Rprt ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp  ProtocolIE-ID ::= 33
id-CommonMeasurementType           ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID         ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD ProtocolIE-ID ::= 37
id-CommunicationControlPortID      ProtocolIE-ID ::= 40
id-ConfigurationGenerationID       ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID     ProtocolIE-ID ::= 44
id-CriticalityDiagnostics           ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD                 ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD    ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD                 ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD  ProtocolIE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD  ProtocolIE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD  ProtocolIE-ID ::= 54
id-DCH-DeleteList-RL-ReconfRqstTDD  ProtocolIE-ID ::= 55
id-DCH-FDD-Information              ProtocolIE-ID ::= 56

```

id-DCH-TDD-Information	ProtocolIE-ID ::= 57
id-DCH-InformationResponse	ProtocolIE-ID ::= 59
id-FDD-DCHs-to-Modify	ProtocolIE-ID ::= 62
id-TDD-DCHs-to-Modify	ProtocolIE-ID ::= 63
id-DCH-ModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 65
id-DCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 135
id-DedicatedMeasurementObjectType-DM-Rprt	ProtocolIE-ID ::= 67
id-DedicatedMeasurementObjectType-DM-Rqst	ProtocolIE-ID ::= 68
id-DedicatedMeasurementObjectType-DM-Rsp	ProtocolIE-ID ::= 69
id-DedicatedMeasurementType	ProtocolIE-ID ::= 70
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 72
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 73
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 76
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 79
id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 83
id-DL-DPCH-TimingAdjustment	ProtocolIE-ID ::= 21
id-DL-ReferencePowerInformationItem-DL-PC-Rqst	ProtocolIE-ID ::= 84
id-DLReferencePower	ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 86
id-DSCH-AddItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 87
id-DSCHs-to-Add-FDD	ProtocolIE-ID ::= 89
id-DSCH-DeleteItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 91
id-DSCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 100
id-DSCH-InformationResponse	ProtocolIE-ID ::= 105
id-DSCH-FDD-Information	ProtocolIE-ID ::= 106
id-DSCH-TDD-Information	ProtocolIE-ID ::= 107
id-DSCH-ModifyItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 108
id-DSCH-ModifyList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 112
id-DSCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 136
id-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 113
id-FACH-Information	ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd	ProtocolIE-ID ::= 123
id-Local-Cell-ID	ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 128
id-AdjustmentPeriod	ProtocolIE-ID ::= 129
id-MaxAdjustmentStep	ProtocolIE-ID ::= 130

id-MaximumTransmissionPower	ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 132
id-MeasurementID	ProtocolIE-ID ::= 133
id-MessageStructure	ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst	ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID	ProtocolIE-ID ::= 143
id-NeighbouringCellMeasurementInformation	ProtocolIE-ID ::= 455
id-P-CCPCH-Information	ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 145
id-P-CPICH-Information	ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 147
id-P-SCH-Information	ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 156
id-PCH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 157
id-PCH-Information	ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 165
id-PICH-Information	ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 168
id-PowerAdjustmentType	ProtocolIE-ID ::= 169
id-PRACH-Information	ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 176
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 189
id-RACH-Information	ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 197
id-ReportCharacteristics	ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD	ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRqst	ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 207

id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRqstFDD	ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRqstFDD	ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRqst	ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 214
id-RL-InformationList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 215
id-RL-InformationList-RL-SetupRqstFDD	ProtocolIE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady	ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-ReconfRsp	ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 221
id-RL-InformationResponseList-RL-ReconfReady	ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-ReconfRsp	ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 225
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 228
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 229
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure	ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 241
id-RL-Set-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 242
id-S-CCPCH-Information	ProtocolIE-ID ::= 247
id-S-CPICH-Information	ProtocolIE-ID ::= 249
id-SCH-Information	ProtocolIE-ID ::= 251
id-S-SCH-Information	ProtocolIE-ID ::= 253
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD	ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD	ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 264
id-SecondarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate	ProtocolIE-ID ::= 266
id-SFN	ProtocolIE-ID ::= 268
id-SignallingBearerRequestIndicator	ProtocolIE-ID ::= 138
id-ShutdownTimer	ProtocolIE-ID ::= 269
id-Start-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 114
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 270
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 271
id-SyncCase	ProtocolIE-ID ::= 274
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH	ProtocolIE-ID ::= 275
id-T-Cell	ProtocolIE-ID ::= 276

id-TargetCommunicationControlPortID	ProtocolIE-ID ::= 139
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 277
id-TimeSlotConfigurationList-Cell-SetupRqstTDD	ProtocolIE-ID ::= 278
id-TransmissionDiversityApplied	ProtocolIE-ID ::= 279
id-TypeOfError	ProtocolIE-ID ::= 508
id-UARFCNforNt	ProtocolIE-ID ::= 280
id-UARFCNforNd	ProtocolIE-ID ::= 281
id-UARFCNforNu	ProtocolIE-ID ::= 282
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 284
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 285
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 288
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 289
id-UL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 291
id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 293
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 294
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 295
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 296
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 297
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD	ProtocolIE-ID ::= 300
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD	ProtocolIE-ID ::= 301
id-USCH-Information-Add	ProtocolIE-ID ::= 302
id-USCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 304
id-USCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 306
id-USCH-InformationResponse	ProtocolIE-ID ::= 309
id-USCH-Information	ProtocolIE-ID ::= 310
id-USCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 141
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 315
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 316
id-AdjustmentRatio	ProtocolIE-ID ::= 317
id-AP-AICH-Information	ProtocolIE-ID ::= 320
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 323
id-CauseLevel-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 324
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 329
id-CDCA-ICH-Information	ProtocolIE-ID ::= 330
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode	ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag	ProtocolIE-ID ::= 335
id-CPCH-Information	ProtocolIE-ID ::= 336
id-CPCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 342
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 352

id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count	ProtocolIE-ID ::= 358
id-DPC-Mode	ProtocolIE-ID ::= 450
id-DPCHConstant	ProtocolIE-ID ::= 359
id-DSCH-FDD-Common-Information	ProtocolIE-ID ::= 94
id-EnhancedDSCHPC	ProtocolIE-ID ::= 110
id-EnhancedDSCHPCIndicator	ProtocolIE-ID ::= 111
id-FACH-ParametersList-CTCH-SetupRsp	ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 375
id-PCPCH-Information	ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 380
id-PRACHConstant	ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 383
id-PUSCHConstant	ProtocolIE-ID ::= 384
id-RACH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 385
id-SSDT-CellIDforEDSCHPC	ProtocolIE-ID ::= 443
id-Synchronisation-Configuration-Cell-ReconfRqst	ProtocolIE-ID ::= 393
id-Synchronisation-Configuration-Cell-SetupRqst	ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 398
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 403
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 407
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 408
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 409
id-CommunicationContextInfoItem-Reset	ProtocolIE-ID ::= 412
id-CommunicationControlPortInfoItem-Reset	ProtocolIE-ID ::= 414
id-ResetIndicator	ProtocolIE-ID ::= 416
id-TFCI2-Bearer-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 417
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD	ProtocolIE-ID ::= 418
id-TFCI2-BearerInformationResponse	ProtocolIE-ID ::= 419
id-TFCI2BearerRequestIndicator	ProtocolIE-ID ::= 142
id-TimingAdvanceApplied	ProtocolIE-ID ::= 287
id-CFNReportingIndicator	ProtocolIE-ID ::= 6
id-SFNReportingIndicator	ProtocolIE-ID ::= 11
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 12
id-TimeslotISCPInfo	ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 47

id-CauseLevel-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 420
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 421
id-CellAdjustmentInfoItem-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 494
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 482
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 422
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 423
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 424
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 425
id-CellSyncBurstTransInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 426
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 427
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 428
id-CellSyncInfo-CellSyncReprtTDD	ProtocolIE-ID ::= 429
id-CSBTransmissionID	ProtocolIE-ID ::= 430
id-CSBMeasurementID	ProtocolIE-ID ::= 431
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 432
id-NCyclesPerSFNperiod	ProtocolIE-ID ::= 433
id-NRepetitionsPerCyclePeriod	ProtocolIE-ID ::= 434
id-SyncFrameNumber	ProtocolIE-ID ::= 437
id-SynchronisationReportType	ProtocolIE-ID ::= 438
id-SynchronisationReportCharacteristics	ProtocolIE-ID ::= 439
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 440
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 119
id-ReferenceClockAvailability	ProtocolIE-ID ::= 435
id-ReferenceSFNoffset	ProtocolIE-ID ::= 436
id-InformationExchangeID	ProtocolIE-ID ::= 444
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 445
id-InformationType	ProtocolIE-ID ::= 446
id-InformationReportCharacteristics	ProtocolIE-ID ::= 447
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 448
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 449
id-IPDLParameter-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 451
id-IPDLParameter-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 452
id-IPDLParameter-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 453
id-IPDLParameter-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 454
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 74
id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 75
id-DwPCH-LCR-Information	ProtocolIE-ID ::= 78
id-DwPCH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 80
id-DwPCH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 90
id-DwPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 97
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 99
id-DwPCH-LCR-Information-ResourceStatusInd	ProtocolIE-ID ::= 101
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 154
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 174
id-FPACH-LCR-Information	ProtocolIE-ID ::= 290
id-FPACH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 292
id-FPACH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 22
id-FPACH-LCR-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 311
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 312
id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 313
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 314
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 456
id-PCH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 457

id-PCH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 458
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 459
id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 460
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 461
id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 462
id-RL-InformationResponse-LCR-RL-SetupRspTDD	ProtocolIE-ID ::= 463
id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 464
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 465
id-TimeSlot	ProtocolIE-ID ::= 495
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 466
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 467
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD	ProtocolIE-ID ::= 468
id-TimeSlotLCR-CM-Rqst	ProtocolIE-ID ::= 469
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 470
id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 471
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 472
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 473
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 474
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 475
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 476
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 477
id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 478
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 479
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD	ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationModify-AddList	ProtocolIE-ID ::= 483
id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 484
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 485
id-UL-SIRTarget	ProtocolIE-ID ::= 510
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 486
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 487
id-PDSCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 26
id-PDSCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 27
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 488
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 489
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 490
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 491
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 493
id-timeslotInfo-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 496
id-SyncReportType-CellSyncReprtTDD	ProtocolIE-ID ::= 497
id-Power-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 498
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 499
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 500
id-Power-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 501
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 502
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd	ProtocolIE-ID ::= 503
id-Power-Local-Cell-Group-ID	ProtocolIE-ID ::= 504
id-PUSCH-Info-DM-Rqst	ProtocolIE-ID ::= 505
id-PUSCH-Info-DM-Rsp	ProtocolIE-ID ::= 506
id-PUSCH-Info-DM-Rprt	ProtocolIE-ID ::= 507
id-InitDL-Power	ProtocolIE-ID ::= 509
id-cellSyncBurstRepetitionPeriod	ProtocolIE-ID ::= 511

id-ReportCharacteristicsType-OnModification	ProtocolIE-ID ::= 512
id-SFNMeasurementValueInformation	ProtocolIE-ID ::= 513
id-SFNMeasurementThresholdInformation	ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation	ProtocolIE-ID ::= 515
id-TUTRANGPSMeasurementThresholdInformation	ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 520
id-RL-InformationResponse-LCR-RL-AdditionRspTDD	ProtocolIE-ID ::= 51
id-DL-PowerBalancing-Information	ProtocolIE-ID ::= 28
id-DL-PowerBalancing-ActivationIndicator	ProtocolIE-ID ::= 29
id-DL-PowerBalancing-UpdatedIndicator	ProtocolIE-ID ::= 30
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD	ProtocolIE-ID ::= 517
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD	ProtocolIE-ID ::= 518
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD	ProtocolIE-ID ::= 519
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 41
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 42
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst	ProtocolIE-ID ::= 522
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst	ProtocolIE-ID ::= 523
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 524
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 525
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 526
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 527
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 528
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 529
id-bindingID	ProtocolIE-ID ::= xxx
id-RL-Specific-DCH-Info	ProtocolIE-ID ::= xxx
id-transportlayeraddress	ProtocolIE-ID ::= xxx
id-DelayedActivation	ProtocolIE-ID ::= 231
id-DelayedActivationList-RL-ActivationCmdFDD	ProtocolIE-ID ::= 232
id-DelayedActivationInformation-RL-ActivationCmdFDD	ProtocolIE-ID ::= 233
id-DelayedActivationList-RL-ActivationCmdTDD	ProtocolIE-ID ::= 234
id-DelayedActivationInformation-RL-ActivationCmdTDD	ProtocolIE-ID ::= 235
id-neighbouringTDDCellMeasurementInformationLCR	ProtocolIE-ID ::= 58
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 543
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 544
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 545
id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 546
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 547
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD	ProtocolIE-ID ::= 548
id-SyncDLCodeIdThreInfoLCR	ProtocolIE-ID ::= 549
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 550
id-DwPCH-Power	ProtocolIE-ID ::= 551
id-Angle-Of-Arrival-Value-LCR	ProtocolIE-ID ::= 521
id-HSDSCH-FDD-Information	ProtocolIE-ID ::= 530
id-HSDSCH-FDD-Information-Response	ProtocolIE-ID ::= 531
id-HSDSCH-FDD-Information-to-Add	ProtocolIE-ID ::= 532
id-HSDSCH-FDD-Information-to-Delete	ProtocolIE-ID ::= 533
id-HSDSCH-Information-to-Modify	ProtocolIE-ID ::= 534
id-HSDSCH-RNTI	ProtocolIE-ID ::= 535
id-HSDSCH-TDD-Information	ProtocolIE-ID ::= 536
id-HSDSCH-TDD-Information-Response	ProtocolIE-ID ::= 537
id-HSDSCH-TDD-Information-Response-LCR	ProtocolIE-ID ::= 538
id-HSDSCH-TDD-Information-to-Add	ProtocolIE-ID ::= 539
id-HSDSCH-TDD-Information-to-Delete	ProtocolIE-ID ::= 540

id-HSPDSCH-RL-ID	ProtocolIE-ID ::= 541
id-PrimCCPCH-RSCP-DL-PC-RqstTDD	ProtocolIE-ID ::= 542
id-PDSCH-RL-ID	ProtocolIE-ID ::= 66

END

CHANGE REQUEST

⌘ **25.433 CR 660** ⌘ rev **-** ⌘ Current version: **3.9.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Correction to the use of the <i>CFN</i> IE / <i>SFN</i> IE in the Measurement Initiation procedures		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI Date: ⌘ 29 April, 2002		
Category:	⌘ F Release: ⌘ R99		
	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><i>Use one of the following categories:</i></p> <p>F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> </td> <td style="width: 50%; vertical-align: top;"> <p><i>Use one of the following releases:</i></p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p> </td> </tr> </table>	<p><i>Use one of the following categories:</i></p> <p>F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p><i>Use one of the following releases:</i></p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p>
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Reason for change: ⌘ Current specification states that the *SFN/CFN* IE, if included in the COMMON/DEDICATED MEASUREMENT INITIATION REQUEST message, indicates "the frame for which the first measurement shall be provided". Also, there is a explicit requirement for providing the measurement *immediately* in the "on demand" case. This could be interpreted as the *SFN/CFN* IE being valid only for "periodic" reporting type. However, the intended applicability of the *SFN/CFN* IE is for both "periodic" and "on demand" reporting types, as discussed during the RAN3#16 meeting. For the event triggered case it is already clear that the measurement shall be reported only when conditions are met. So, it should be clarified that the *SFN/CFN* applies to both "periodic" and "on demand" reporting types, and not to the other reporting types.

Summary of change: ⌘ Procedural text clarified in the Common and Dedicated Measurement Initiation procedures to explicitly indicate that the *SFN/CFN* applies for both "periodic" and "on demand" report characteristics. Also, Abnormal condition added, to indicate that the procedure shall be failed when the *SFN / CFN* IE is used but the *Report Characteristics* IE is other than "periodic" or "on demand" (i.e. Events A-F).

Impact Analysis:
Impact assessment towards the previous version of the specification (same release):
This CR has isolated impact with the previous version of the specification (same release) because it affects implementations supporting the corrected functionality, i.e. the CRNC including the *SFN/CFN* IE in the COMMON/DEDICATED MEASUREMENT INITIATION REQUEST message for Events A-F report characteristics, and so, previous Node B implementations may have not been clear when to provide the requested measurement.
This CR has an impact under [functional] point of view.
The impact can be considered isolated because the change affects one system function namely the initiation of measurements including the start *SFN/CFN*.

Consequences if not approved:	⌘	The correct applicability of the <i>SFN/CFN</i> IE would remain unclear and that could lead to different interpretations, causing interoperability problems. The Node B could start the measurement in an instant of time that was not the one expected by the RNC, possibly impacting on algorithms.
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Clauses affected:	⌘	8.2.8, 8.3.8									
Other specs affected:	⌘	<table border="1"> <tr> <td>Other core specifications</td> <td>⌘</td> <td>CR661 25.433 R4, CR662 25.433 R5 CR624 25.423 R99, CR625 25.423 R4, CR626 25.423 R5</td> </tr> <tr> <td>Test specifications</td> <td></td> <td>None</td> </tr> <tr> <td>O&M Specifications</td> <td></td> <td></td> </tr> </table>	Other core specifications	⌘	CR661 25.433 R4, CR662 25.433 R5 CR624 25.423 R99, CR625 25.423 R4, CR626 25.423 R5	Test specifications		None	O&M Specifications		
Other core specifications	⌘	CR661 25.433 R4, CR662 25.433 R5 CR624 25.423 R99, CR625 25.423 R4, CR626 25.423 R5									
Test specifications		None									
O&M Specifications											
Other comments:	⌘										

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/>. For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.2.8 Common Measurement Initiation

8.2.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on common resources in a Node B.

8.2.8.2 Successful Operation

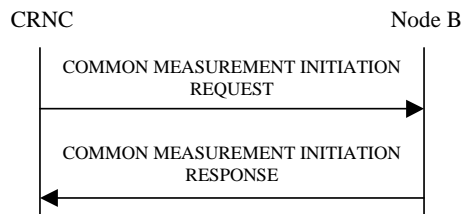


Figure 11: Common Measurement Initiation procedure, Successful Operation

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the Node B control port.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

[TDD - If the Time Slot Information is provided in the *Common Measurement Object Type IE*, the measurement request shall apply to the requested time slot individually.]

[FDD - If the Spreading Factor Information is provided in the *Common Measurement Object Type IE*, measurement request shall apply to the PCPCHs whose minimum allowed spreading factor (Min UL Channelisation Code Length) is equal to the value of Spreading Factor Information.

If the *SFN Reporting Indicator IE* is set to "FN Reporting Required", the *SFN IE* shall be included in the measurement report or in the measurement response, the latter only in the case the *Report Characteristics IE* is set to 'On-Demand'. The reported SFN shall be the SFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25].

~~If the *SFN IE* is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].~~

Report characteristics

The *Report Characteristics IE* indicates how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics IE* is set to 'On-Demand' and if the *SFN IE* is not provided, the Node B shall report the result of the requested measurement immediately. ~~If the *SFN IE* is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].~~

If the *Report Characteristics IE* is set to 'Periodic', the Node B shall periodically initiate a Measurement Reporting procedure for this measurement, with the requested report frequency. ~~If the *SFN IE* is provided, it indicates the frame for which the first measurement value of a periodic reporting shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].~~

If the *Report Characteristics IE* is set to 'Event A', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics IE* is set to 'Event B', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event C', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event D', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls more than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event E', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to 'Event F', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the Node B shall also initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is not set to 'On-Demand', the Node B is required to perform reporting for a common measurement object, in accordance with the conditions provided in the COMMON MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no common measurement object(s) for which a measurement is defined exists any more the Node B shall terminate the measurement locally without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Common Measurement Reporting procedure immediately, and then continue with the measurements as specified in the COMMON MEASUREMENT INITIATION REQUEST message.

Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows:

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the COMMON MEASUREMENT INITIATION RESPONSE, COMMON MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n)

$a = 1/2^{(k/2)}$, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

Response message

If the Node B was able to initiate the measurement requested by the CRNC it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message sent over the Node B control port. The message shall include the same Measurement ID that was used in the measurement request. Only in the case when the *Report Characteristics* IE is set to "On-Demand", the COMMON MEASUREMENT INITIATION RESPONSE message shall contain the measurement result.

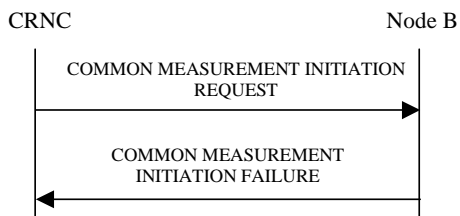
8.2.8.3 Unsuccessful Operation

Figure 12: Common Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a COMMON MEASUREMENT INITIATION FAILURE message sent over the Node B control port. The message shall include the same Measurement ID that was used in the COMMON MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Measurement not supported for the object.
- Measurement Temporarily not Available

8.2.8.4 Abnormal Conditions

If the Common Measurement Type received in the *Common Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Common Measurement Object Type received in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message the Node B shall regard the Common Measurement Initiation procedure as failed.

[TDD - If the common measurement requires the Time Slot Information but the *Time Slot* IE is not provided in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message the Node B shall regard the Common Measurement Initiation procedure as failed.]

If the *SFN* IE is included in the COMMON MEASUREMENT INITIATION REQUEST message and the *Report Characteristics* IE is other than "Periodic" or "On Demand", the Node B shall regard the Common Measurement Initiation procedure as failed.

8.3.8 Dedicated Measurement Initiation

8.3.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on dedicated resources in a Node B.

The Dedicated Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.8.2 Successful Operation

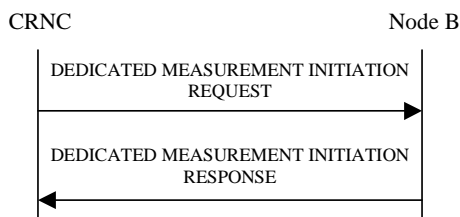


Figure 38: Dedicated Measurement Initiation procedure, Successful Operation

The procedure is initiated with a DEDICATED MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the communication control port assigned to the Node B communication context.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below the meaning of the parameters are given in other specifications.

If the *Node B Communication Context ID* IE equals the reserved value 'All NBCC', this measurement request shall apply for all current and future Node B Communication Contexts controlled via the Communication Control Port on which the DEDICATED MEASUREMENT INITIATION REQUEST message was received. Otherwise, this measurement request shall apply for the requested Node B Communication Context ID only.

If the *Node B Communication Context ID* IE equals the reserved value 'All NBCC', the measurement request shall be treated as a single measurement, despite applying to multiple contexts. This means that it may only be terminated or failed on 'All NBCC'.

If the *Node B Communication Context ID* IE equals the reserved value 'All NBCC', the measurement shall be initiated only for those Node B Communication Contexts handling a mode (FDD or TDD) for which the concerned measurement is specified in [4] and [5].

If the *Dedicated Measurement Object Type* IE is set to "RL", measurement results shall be reported for all indicated Radio Links.

[FDD – If the *Dedicated Measurement Object Type* IE is set to "RLS", measurement results shall be reported for all indicated Radio Link Sets.]

[FDD - If the *Dedicated Measurement Object Type* IE is set to "ALL RL", measurement results shall be reported for all current and future Radio Links within the Node B Communication Context.]

[TDD - If the *Dedicated Measurement Object Type* IE is set to "ALL RL", measurement results shall be reported for one existing DPCH per CCTrCH in each used time slot of current and future Radio Links within the Node B Communication Context, provided the measurement type is applicable to the respective DPCH.]

[FDD – If the *Dedicated Measurement Object Type* IE is set to "ALL RLS", measurement results shall be reported for all existing and future Radio Link Sets within the Node B Communication Context.]

[TDD – If the *DPCH ID* IE is provided within the RL Information the measurement request shall apply for the requested physical channel individually. If no *DPCH ID* IE is provided within the RL Information the measurement request shall apply for one existing DPCH per CCTrCH in each used time slot of the Radio Link, provided the measurement type is applicable to this DPCH]

If the *CFN Reporting Indicator* IE is set to "FN Reporting Required", the *CFN* IE shall be included in the measurement report or in the measurement response, the latter only in the case the *Report Characteristics* IE is set to 'On-Demand'. The reported CFN shall be the CFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *CFN* IE is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

Report characteristics

The *Report Characteristics* IE is set to how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to 'On-Demand' and if the *CFN* IE is not provided, the Node B shall return the result of the measurement immediately. If the *CFN* IE is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to 'Periodic', the Node B shall periodically initiate the Dedicated Measurement Report procedure for this measurement, with the requested report frequency. If the *CFN* IE is provided, it indicates the frame for which the first measurement value of a periodic reporting shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to 'Event A', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event B', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event C', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event D', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event E', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to 'Event F', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is not set to 'On-Demand', the Node B is required to perform reporting for a dedicated measurement object, in accordance with the conditions provided in the DEDICATED MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no dedicated measurement object(s) for which a measurement is defined exists any more the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Dedicated Measurement Reporting procedure immediately, and then continue with the measurements as specified in the DEDICATED MEASUREMENT INITIATION REQUEST message.

Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the DEDICATED MEASUREMENT INITIATION RESPONSE, DEDICATED MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n)

$a = 1/2^{(k/2)}$, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

Response message

If the Node B was able to initiate the measurement requested by the CRNC, it shall respond with the DEDICATED MEASUREMENT INITIATION RESPONSE message using the communication control port assigned to the Node B communication context. The message shall include the same Measurement ID that was used in the measurement request.

Only in the case when *Report Characteristics* IE is set to "On-Demand", the DEDICATED MEASUREMENT INITIATION RESPONSE message shall contain the measurement result. In this case also the *Dedicated Measurement Object* IE shall be included if it was included in the request message.

In the case that the *Node B Communication Context ID* IE is set to 'All NBCC', the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE shall be set to the value 'All CRNCCC', which is reserved for this purpose.

Interaction with Reset Procedure

If a measurement has been requested with the *Node B Communication Context ID* IE set to 'All NBCC', the Node B shall terminate the measurement locally if either the CRNC or the Node B initiates the Reset procedure for the relevant Communication Control Port or the entire Node B.

8.3.8.3 Unsuccessful Operation

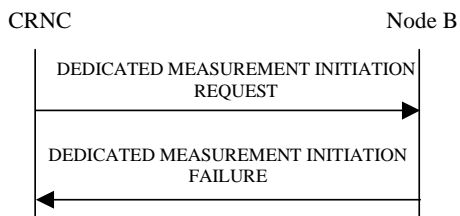


Figure 39: Dedicated Measurement Request procedure: Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a DEDICATED MEASUREMENT INITIATION FAILURE message using the communication control port assigned to the Node B communication context.

The message shall include the same Measurement ID that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

In the case that the *Node B Communication Context ID* IE is set to 'All NBCC' the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION FAILURE shall be set to the value 'All CRNCCC', which is reserved for this purpose.

Typical cause values are as follows:

Radio Network Layer cause

- Measurement not supported for the object
- Measurement Temporarily not Available

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.8.4 Abnormal Conditions

If the Dedicated Measurement Type received in the *Dedicated Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Dedicated Measurement Object Type received in the *Dedicated Measurement Object Type* IE in the DEDICATED MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

If the *CFN* IE is included in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Report Characteristics* IE is other than "Periodic" or "On Demand", the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

CHANGE REQUEST

⌘ **25.433 CR 661** ⌘ rev **-** ⌘ Current version: **4.4.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Correction to the use of the <i>CFN</i> IE / <i>SFN</i> IE in the Measurement Initiation procedures		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI Date: ⌘ 7 May, 2002		
Category:	⌘ A Release: ⌘ REL-4		
	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><i>Use one of the following categories:</i></p> <p>F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> </td> <td style="width: 50%; vertical-align: top;"> <p><i>Use one of the following releases:</i></p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p> </td> </tr> </table>	<p><i>Use one of the following categories:</i></p> <p>F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p><i>Use one of the following releases:</i></p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p>
<p><i>Use one of the following categories:</i></p> <p>F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p><i>Use one of the following releases:</i></p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p>		

Reason for change: ⌘ Current specification states that the *SFN/CFN* IE, if included in the COMMON/DEDICATED MEASUREMENT INITIATION REQUEST message, indicates "the frame for which the first measurement shall be provided". Also, there is a explicit requirement for providing the measurement *immediately* in the "on demand" case. This could be interpreted as the *SFN/CFN* IE being valid only for "periodic" reporting type. However, the intended applicability of the *SFN/CFN* IE is for both "periodic" and "on demand" reporting types, as discussed during the RAN3#16 meeting. For the event triggered case it is already clear that the measurement shall be reported only when conditions are met. So, it should be clarified that the *SFN/CFN* applies to both "periodic" and "on demand" (and "on modification") reporting types, and not to the other reporting types.

Summary of change: ⌘ Procedural text clarified in the Common and Dedicated Measurement Initiation procedures to explicitly indicate that the *SFN/CFN* applies for "periodic", "on demand" and "on modification" report characteristics. Also, Abnormal condition added, to indicate that the procedure shall be failed when the *SFN / CFN* IE is used but the *Report Characteristics* IE is other than "periodic", "on demand" or "on modification" (i.e. Events A-F).

Impact Analysis:

Impact assessment towards the previous version of the specification (same release):

This CR has isolated impact with the previous version of the specification (same release) because it affects implementations supporting the corrected functionality, i.e. the CRNC including the *SFN/CFN* IE in the COMMON/DEDICATED MEASUREMENT INITIATION REQUEST message for Events A-F report characteristics, and so, previous Node B implementations may have not been clear when to provide the requested measurement.

This CR has an impact under [functional] point of view.

The impact can be considered isolated because the change affects one system function namely the initiation of measurements including the start *SFN/CFN*.

Consequences if not approved:	⌘	The correct applicability of the <i>SFN/CFN</i> IE would remain unclear and that could lead to different interpretations, causing interoperability problems. The Node B could start the measurement in an instant of time that was not the one expected by the RNC, possibly impacting on algorithms.	
Clauses affected:	⌘	8.2.8, 8.3.8	
Other specs affected:	⌘	Other core specifications	⌘ CR624 25.423 R99, CR625 25.423 R4 CR626 25.423 R5 CR660 25.433 R99, CR662 25.433 R5
		Test specifications	None
		O&M Specifications	
Other comments:	⌘		

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/>. For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.2.8 Common Measurement Initiation

8.2.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on common resources in a Node B.

8.2.8.2 Successful Operation

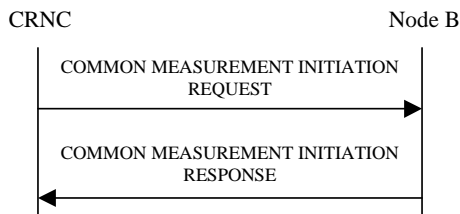


Figure 11: Common Measurement Initiation procedure, Successful Operation

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the Node B control port.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

[TDD - If the Time Slot Information is provided in the *Common Measurement Object Type IE*, the measurement request shall apply to the requested time slot individually.]

[FDD - If the Spreading Factor Information is provided in the *Common Measurement Object Type IE*, measurement request shall apply to the PCPCHs whose minimum allowed spreading factor (Min UL Channelisation Code Length) is equal to the value of Spreading Factor Information.

If the *Common Measurement Type IE* is not set to 'SFN-SFN Observed Time Difference' and the *SFN Reporting Indicator IE* is set to "FN Reporting Required", the *SFN IE* shall be included in the measurement report or in the measurement response, the latter only in the case the *Report Characteristics IE* is set to 'On-Demand'. The reported SFN shall be the SFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25]. If the *Common Measurement Type IE* is set to 'SFN-SFN Observed Time Difference' and the *SFN Reporting Indicator IE* is ignored.

~~If the *SFN IE* is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].~~

Common measurement type

If the *Common Measurement Type IE* is set to 'SFN-SFN Observed Time Difference', then the Node B shall initiate the SFN-SFN Observed Time Difference measurements between the reference cell identified by *C-ID IE* and the neighbouring cells identified by the *UTRAN Cell Identifier(UC-Id) IE*.

Report characteristics

The *Report Characteristics IE* indicates how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics IE* is set to 'On-Demand' and if the *SFN IE* is not provided, the Node B shall report the result of the requested measurement immediately. If the *SFN IE* is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics IE* is set to 'Periodic', the Node B shall periodically initiate a Measurement Reporting procedure for this measurement, with the requested report frequency. If the *Common Measurement Type IE* is set to 'SFN-SFN Observed Time Difference', all the available measurement results shall be reported in the *Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information IE* in the *SFN-SFN Measurement Value Information IE* and the Node B shall indicate in the *Unsuccessful Neighbouring cell SFN-SFN Observed Time*

Difference Measurement Information IE all the remaining neighbouring cells with no measurement result available in the Common Measurement Reporting procedure. If the *SFN* IE is provided, it indicates the frame for which the first measurement value of a periodic reporting shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to 'Event A', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event B', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event C', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event D', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls more than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event E', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to 'Event F', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the Node B shall also initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to 'On Modification' and if the *SFN* IE is not provided, the Node B shall report the result of the requested measurement immediately. If the *SFN* IE is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25]. Then the Node B shall initiate the Common Measurement Reporting procedure in accordance to the following conditions: 1. If the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS':

If the $T_{UTRAN-GPS}$ *Change Limit* IE is included in the $T_{UTRAN-GPS}$ *Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of $T_{UTRAN-GPS}$ value (F_n). The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of F_n rises above the threshold indicated by the $T_{UTRAN-GPS}$ *Change Limit* IE. The change of $T_{UTRAN-GPS}$ value (F_n) is calculated according to the following:

$$F_n=0 \text{ for } n=0$$

$$F_n = (M_n - M_{n-1}) \text{ mod } 37152912000000 - ((SFN_n - SFN_{n-1}) \text{ mod } 4096) * 10 * 3.84 * 10^3 * 16 + F_{n-1}$$

$$\text{for } n > 0$$

F_n is the change of the $T_{UTRAN-GPS}$ value expressed in unit [1/16 chip] when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M_{n-1} is the previous measurement result received after point C in the measurement model [25], measured at SFN_{n-1}.

M_j is the first measurement result received after point C in the measurement model [25], after first Common Measurement Reporting at initiation or after the last event was triggered.

M_0 is equal to the value reported in the first Common Measurement Reporting at initiation or in the Common Measurement Reporting when the event was triggered.

If the *Predicted T_{UTRAN-GPS} Deviation Limit* IE is included in the *T_{UTRAN-GPS} Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the P_n and F_n . The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when F_n rises above the threshold indicated by the *Predicted T_{UTRAN-GPS} Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$$P_n = b \text{ for } n=0$$

$$P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096)/100 + ((SFN_n - SFN_{n-1}) \bmod 4096) * 10 * 3.84 * 10^3 * 16 + P_{n-1}) \bmod 37158912000000 \text{ for } n > 0$$

$$F_n = \min((M_n - P_n) \bmod 37158912000000, (P_n - M_n) \bmod 37158912000000) \text{ for } n > 0$$

P_n is the predicted T_{UTRAN-GPS} value when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported T_{UTRAN-GPS} Drift Rate value.

b is the last reported T_{UTRAN-GPS} value.

F_n is the deviation of the last measurement result from the predicted T_{UTRAN-GPS} value (P_n) when n measurements has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M_j is the first measurement result received after point C in the measurement model [25], after first Common Measurement Reporting at initiation or after the last event was triggered.

The T_{UTRAN-GPS} Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

2. If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference':

If the *SFN-SFN Change Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of SFN-SFN value (F_n). The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when F_n rises above the threshold indicated by the *SFN-SFN Change Limit* IE. The change of the SFN-SFN value is calculated according to the following:

$$F_n = 0 \text{ for } n=0$$

$$[\text{FDD} - F_n = (M_n - a) \bmod 614400 \text{ for } n > 0]$$

$$[\text{TDD} - F_n = (M_n - a) \bmod 40960 \text{ for } n > 0]$$

F_n is the change of the SFN-SFN

value expressed in unit [1/16 chip] when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN .

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M_j is the first measurement result received after point C in the measurement model [25] after first Common Measurement Reporting at initiation or after the last event was triggered.

If the *Predicted SFN-SFN Deviation Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the P_n and F_n . The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when the F_n rises above the threshold indicated by the *Predicted SFN-SFN Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$$P_n = b \quad \text{for } n=0$$

$$[\text{FDD} - P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096)/100 + P_{n-1}) \bmod 614400 \quad \text{for } n>0$$

$$F_n = \min((M_n - P_n) \bmod 614400, (P_n - M_n) \bmod 614400) \quad \text{for } n>0]$$

$$[\text{TDD} - P_n = ((a/16) * (15*(SFN_n - SFN_{n-1}) \bmod 4096 + (TS_n - TS_{n-1}))/1500 + P_{n-1}) \bmod 40960 \quad \text{for } n>0$$

$$F_n = \min((M_n - P_n) \bmod 40960, (P_n - M_n) \bmod 40960) \quad \text{for } n>0]$$

P_n is the predicted SFN-SFN value when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN Drift Rate value.

b is the last reported SFN-SFN value.

abs denotes the absolute value.

F_n is the deviation of the last measurement result from the predicted SFN-SFN value (P_n) when n measurements has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at the [TDD -Time Slot TS_n] of the Frame SFN_n.

M_j is the first measurement result received after point C in the measurement model [25] after first Common Measurement Reporting at initiation or after the last event was triggered.

The SFN-SFN Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

If the *Report Characteristics* IE is not set to 'On-Demand', the Node B is required to perform reporting for a common measurement object, in accordance with the conditions provided in the COMMON MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no common measurement object(s) for which a measurement is defined exists any more the Node B shall terminate the measurement locally without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Common Measurement Reporting procedure immediately, and then continue with the measurements as specified in the COMMON MEASUREMENT INITIATION REQUEST message.

Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows:

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the COMMON MEASUREMENT INITIATION RESPONSE, COMMON MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n)

$a = 1/2^{(k/2)}$, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

Common measurement accuracy

If the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS', then the Node B shall use the *UTRAN GPS Timing Measurement Accuracy Class* IE included in the *Common Measurement Accuracy* IE according to the following:

If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates 'Class A', then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes A, B and C.

If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates 'Class B', then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes B and C.

If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates 'Class C' then the Node B shall perform the measurements with the accuracy according to class C.

Response message

If the Node B was able to initiate the measurement requested by the CRNC it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message sent over the Node B control port. The message shall include the same Measurement ID that was used in the measurement request. Only in the case when the *Report Characteristics* IE is set to "On-Demand", or "On Modification", the COMMON MEASUREMENT INITIATION RESPONSE message shall contain the measurement result and also the *Common Measurement Achieved Accuracy* IE if the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS'.

If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference' and the *Report Characteristics* IE is set to 'On Demand' or "On Modification", all the available measurement results shall be reported in the *Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE in the *SFN-SFN Measurement Value Information* IE and the Node B shall indicate in the *Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE all the remaining neighbouring cells with no measurement result available in the COMMON MEASUREMENT INITIATION RESPONSE message.

8.2.8.3 Unsuccessful Operation

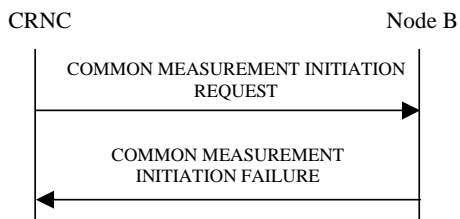


Figure 12: Common Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a COMMON MEASUREMENT INITIATION FAILURE message sent over the Node B control port. The message shall include the same Measurement ID that was used in the COMMON MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Measurement not supported for the object.
- Measurement Temporarily not Available

8.2.8.4 Abnormal Conditions

If the Common Measurement Type received in the *Common Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Common Measurement Object Type received in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message the Node B shall regard the Common Measurement Initiation procedure as failed.

[TDD - If the common measurement type requires the Time Slot Information but the [3.84Mcps TDD - *Time Slot* IE] [1.28Mcps TDD - - *Time SlotLCR* IE] is not provided in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message the Node B shall regard the Common Measurement Initiation procedure as failed.]

If the COMMON MEASUREMENT INITIATION REQUEST message contains the *SFN-SFN Measurement Threshold Information* IE (in the *Measurement Threshold* IE contained in the *Report Characteristics* IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the COMMON MEASUREMENT INITIATION REQUEST message contains the $T_{UTRAN-GPS}$ *Measurement Threshold Information* IE (in the *Measurement Threshold* IE contained in the *Report Characteristics* IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference', but the *Neighbouring Cell Measurement Information* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

If the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS', but the $T_{UTRAN-GPS}$ *Measurement Accuracy Class* IE in the *Common Measurement Accuracy* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

The allowed combinations of the Common measurement type and Report characteristics type are shown in the table below marked with "X". For not allowed combinations, the Node B shall regard the Common Measurement Initiation procedure as failed.

Table 4: Allowed Common measurement type and Report characteristics type combinations

Common measurement type	Report characteristics type								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
Received total wide band power	X	X	X	X	X	X	X	X	
Transmitted Carrier Power	X	X	X	X	X	X	X	X	
Acknowledged PRACH preambles	X	X	X	X	X	X	X	X	
UL Timeslot ISCP	X	X	X	X	X	X	X	X	
Acknowledged PCPCH Access Preambles	X	X	X	X	X	X	X	X	
Detected PCPCH Access Preambles	X	X	X	X	X	X	X	X	
UTRAN GPS Timing of Cell Frames for LCS	X	X							X
SFN-SFN Observed Time Difference	X	X							X

If the SFN IE is included in the COMMON MEASUREMENT INITIATION REQUEST message and the Report Characteristics IE is other than "Periodic", "On Demand" or "On Modification", the Node B shall regard the Common Measurement Initiation procedure as failed.

8.3.8 Dedicated Measurement Initiation

8.3.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on dedicated resources in a Node B.

The Dedicated Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.8.2 Successful Operation

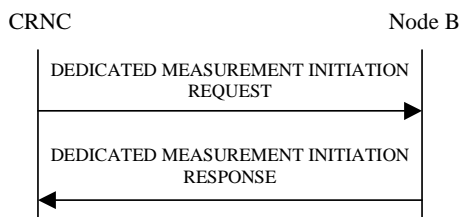


Figure 38: Dedicated Measurement Initiation procedure, Successful Operation

The procedure is initiated with a DEDICATED MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the communication control port assigned to the Node B communication context.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below the meaning of the parameters are given in other specifications.

If the *Node B Communication Context ID* IE equals the reserved value 'All NBCC', this measurement request shall apply for all current and future Node B Communication Contexts controlled via the Communication Control Port on which the DEDICATED MEASUREMENT INITIATION REQUEST message was received. Otherwise, this measurement request shall apply for the requested Node B Communication Context ID only.

If the *Node B Communication Context ID* IE equals the reserved value 'All NBCC', the measurement request shall be treated as a single measurement, despite applying to multiple contexts. This means that it may only be terminated or failed on 'All NBCC'.

If the *Node B Communication Context ID* IE equals the reserved value 'All NBCC', the measurement shall be initiated only for those Node B Communication Contexts handling a mode (FDD, 3.84Mcps TDD or 1.28Mcps TDD) for which the concerned measurement is specified in [4] and [5].

If the *Dedicated Measurement Object Type* IE is set to "RL", measurement results shall be reported for all indicated Radio Links.

[FDD – If the *Dedicated Measurement Object Type* IE is set to "RLS", measurement results shall be reported for all indicated Radio Link Sets.]

[FDD - If the *Dedicated Measurement Object Type* IE is set to "ALL RL", measurement results shall be reported for all current and future Radio Links within the Node B Communication Context.]

[TDD - If the *Dedicated Measurement Object Type* IE is set to "ALL RL", measurement results shall be reported for one existing DPCH per CCTrCH in each used time slot of current and future Radio Links within the Node B Communication Context, provided the measurement type is applicable to the respective DPCH.]

[FDD – If the *Dedicated Measurement Object Type* IE is set to "ALL RLS", measurement results shall be reported for all existing and future Radio Link Sets within the Node B Communication Context.]

[TDD – If the *DPCH ID* IE is provided within the RL Information the measurement request shall apply for the requested physical channel individually. If no *DPCH ID* IE and no *PUSCH Information* IE is provided within the RL Information the measurement request shall apply for one existing physical channel per CCTrCH in each used time slot of the Radio Link, provided the measurement type is applicable to this physical channel.]

[TDD – If the *PUSCH Information* IE is provided within the RL Information the measurement request shall apply for the requested physical channel individually.]

If the *CFN Reporting Indicator* IE is set to "FN Reporting Required", the *CFN* IE shall be included in the measurement report or in the measurement response, the latter only in the case the *Report Characteristics* IE is set to 'On-Demand'. The reported CFN shall be the CFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25].

~~If the *CFN* IE is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].~~

Report characteristics

The *Report Characteristics* IE is set to how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to 'On-Demand' and if the *CFN* IE is not provided, the Node B shall return the result of the measurement immediately. If the *CFN* IE is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to 'Periodic', the Node B shall periodically initiate the Dedicated Measurement Report procedure for this measurement, with the requested report frequency. If the *CFN* IE is provided, it indicates the frame for which the first measurement value of a periodic reporting shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to 'Event A', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event B', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event C', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event D', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event E', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to 'Event F', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is not set to 'On-Demand', the Node B is required to perform reporting for a dedicated measurement object, in accordance with the conditions provided in the DEDICATED MEASUREMENT INITIATION

REQUEST message, as long as the object exists. If no dedicated measurement object(s) for which a measurement is defined exists any more the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Dedicated Measurement Reporting procedure immediately, and then continue with the measurements as specified in the DEDICATED MEASUREMENT INITIATION REQUEST message.

Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the DEDICATED MEASUREMENT INITIATION RESPONSE, DEDICATED MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n)

$a = 1/2^{(k/2)}$, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

Response message

If the Node B was able to initiate the measurement requested by the CRNC, it shall respond with the DEDICATED MEASUREMENT INITIATION RESPONSE message using the communication control port assigned to the Node B communication context. The message shall include the same Measurement ID that was used in the measurement request.

Only in the case when *Report Characteristics* IE is set to "On-Demand", the DEDICATED MEASUREMENT INITIATION RESPONSE message shall contain the measurement result. In this case also the *Dedicated Measurement Object* IE shall be included if it was included in the request message.

In the case that the *Node B Communication Context ID* IE is set to 'All NBCC', the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE shall be set to the value 'All CRNCCC', which is reserved for this purpose.

Interaction with Reset Procedure

If a measurement has been requested with the *Node B Communication Context ID* IE set to 'All NBCC', the Node B shall terminate the measurement locally if either the CRNC or the Node B initiates the Reset procedure for the relevant Communication Control Port or the entire Node B.

8.3.8.3 Unsuccessful Operation

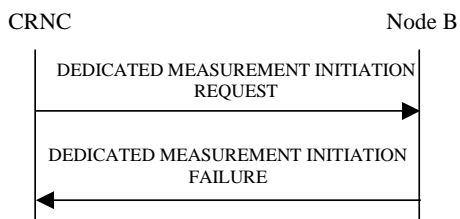


Figure 39: Dedicated Measurement Request procedure: Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a DEDICATED MEASUREMENT INITIATION FAILURE message using the communication control port assigned to the Node B communication context. The message shall include the same Measurement ID that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

In the case that the *Node B Communication Context ID* IE is set to 'All NBCC' the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION FAILURE shall be set to the value 'All CRNCCC', which is reserved for this purpose.

Typical cause values are as follows:

Radio Network Layer cause

- Measurement not supported for the object
- Measurement Temporarily not Available

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.8.4 Abnormal Conditions

The allowed combinations of the Dedicated Measurement Type and Report Characteristics Type are shown in the table below marked with "X". For not allowed combinations, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

Table 4: Allowed Dedicated Measurement Type and Report Characteristics Type combinations

Dedicated Measurement Type	Report Characteristics Type								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
SIR	X	X	X	X	X	X	X	X	
SIR Error	X	X	X	X	X	X	X	X	
Transmitted Code Power	X	X	X	X	X	X	X	X	
RSCP	X	X	X	X	X	X	X	X	
Rx Timing Deviation	X	X	X	X	X	X	X	X	
Round Trip Time	X	X	X	X	X	X	X	X	

If the Dedicated Measurement Type received in the *Dedicated Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Dedicated Measurement Object Type received in the *Dedicated Measurement Object Type* IE in the DEDICATED MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

If the *CFN* IE is included in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Report Characteristics* IE is other than "Periodic" or "On Demand", the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

CHANGE REQUEST

⌘ **25.433 CR 662** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Correction to the use of the <i>CFN</i> IE / <i>SFN</i> IE in the Measurement Initiation procedures		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI Date: ⌘ 7 May, 2002		
Category:	⌘ A Release: ⌘ REL-5		
	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><i>Use one of the following categories:</i></p> <p>F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> </td> <td style="width: 50%; vertical-align: top;"> <p><i>Use one of the following releases:</i></p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p> </td> </tr> </table>	<p><i>Use one of the following categories:</i></p> <p>F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p><i>Use one of the following releases:</i></p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p>
<p><i>Use one of the following categories:</i></p> <p>F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p><i>Use one of the following releases:</i></p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p>		

Reason for change: ⌘ Current specification states that the *SFN/CFN* IE, if included in the COMMON/DEDICATED MEASUREMENT INITIATION REQUEST message, indicates "the frame for which the first measurement shall be provided". Also, there is a explicit requirement for providing the measurement *immediately* in the "on demand" case. This could be interpreted as the *SFN/CFN* IE being valid only for "periodic" reporting type. However, the intended applicability of the *SFN/CFN* IE is for both "periodic" and "on demand" reporting types, as discussed during the RAN3#16 meeting. For the event triggered case it is already clear that the measurement shall be reported only when conditions are met. So, it should be clarified that the *SFN/CFN* applies to both "periodic" and "on demand" (and "on modification") reporting types, and not to the other reporting types.

Summary of change: ⌘ Procedural text clarified in the Common and Dedicated Measurement Initiation procedures to explicitly indicate that the *SFN/CFN* applies for "periodic", "on demand" and "on modification" report characteristics. Also, Abnormal condition added, to indicate that the procedure shall be failed when the *SFN / CFN* IE is used but the *Report Characteristics* IE is other than "periodic", "on demand" or "on modification" (i.e. Events A-F).

Impact Analysis:

Impact assessment towards the previous version of the specification (same release):

This CR has isolated impact with the previous version of the specification (same release) because it affects implementations supporting the corrected functionality, i.e. the CRNC including the *SFN/CFN* IE in the COMMON/DEDICATED MEASUREMENT INITIATION REQUEST message for Events A-F report characteristics, and so, previous Node B implementations may have not been clear when to provide the requested measurement.

This CR has an impact under [functional] point of view.

The impact can be considered isolated because the change affects one system function namely the initiation of measurements including the start *SFN/CFN*.

Consequences if not approved:	⌘	The correct applicability of the <i>SFN/CFN</i> IE would remain unclear and that could lead to different interpretations, causing interoperability problems. The Node B could start the measurement in an instant of time that was not the one expected by the RNC, possibly impacting on algorithms.	
Clauses affected:	⌘	8.2.8, 8.3.8	
Other specs affected:	⌘	Other core specifications	⌘ CR624 25.423 R99, CR625 25.423 R4 CR626 25.423 R5 CR660 25.433 R99, CR661 25.433 R4
		Test specifications	None
		O&M Specifications	
Other comments:	⌘		

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/>. For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.2.8 Common Measurement Initiation

8.2.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on common resources in a Node B.

8.2.8.2 Successful Operation

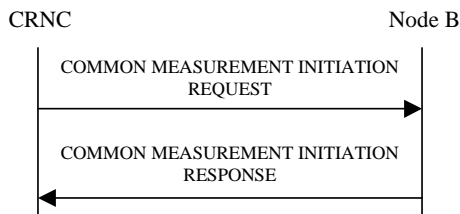


Figure 11: Common Measurement Initiation procedure, Successful Operation

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the Node B control port.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

[TDD - If the Time Slot Information is provided in the *Common Measurement Object Type IE*, the measurement request shall apply to the requested time slot individually.]

[FDD - If the Spreading Factor Information is provided in the *Common Measurement Object Type IE*, measurement request shall apply to the PCPCHs whose minimum allowed spreading factor (Min UL Channelisation Code Length) is equal to the value of Spreading Factor Information.

If the *Common Measurement Type IE* is not set to 'SFN-SFN Observed Time Difference' and the *SFN Reporting Indicator IE* is set to "FN Reporting Required", the *SFN IE* shall be included in the measurement report or in the measurement response, the latter only in the case the *Report Characteristics IE* is set to 'On-Demand'. The reported SFN shall be the SFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25]. If the *Common Measurement Type IE* is set to 'SFN-SFN Observed Time Difference' and the *SFN Reporting Indicator IE* is ignored.

If the *SFN IE* is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

Common measurement type

If the *Common Measurement Type IE* is set to 'SFN-SFN Observed Time Difference', then the Node B shall initiate the SFN-SFN Observed Time Difference measurements between the reference cell identified by *C-ID IE* and the neighbouring cells identified by the *UTRAN Cell Identifier(UC-Id) IE*.

Report characteristics

The *Report Characteristics IE* indicates how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics IE* is set to 'On-Demand' and if the *SFN IE* is not provided, the Node B shall report the result of the requested measurement immediately. If the *SFN IE* is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics IE* is set to 'Periodic', the Node B shall periodically initiate a Measurement Reporting procedure for this measurement, with the requested report frequency. If the *Common Measurement Type IE* is set to 'SFN-SFN Observed Time Difference', all the available measurement results shall be reported in the *Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information IE* in the *SFN-SFN Measurement Value Information IE* and the Node B shall indicate in the *Unsuccessful Neighbouring cell SFN-SFN Observed Time*

Difference Measurement Information IE all the remaining neighbouring cells with no measurement result available in the Common Measurement Reporting procedure. If the *SFN* IE is provided, it indicates the frame for which the first measurement value of a periodic reporting shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to 'Event A', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event B', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event C', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event D', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls more than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event E', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to 'Event F', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the Node B shall also initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to 'On Modification' and if the *SFN* IE is not provided, the Node B shall report the result of the requested measurement immediately. If the *SFN* IE is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25]. Then the Node B shall initiate the Common Measurement Reporting procedure in accordance to the following conditions: 1. If the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS':

If the $T_{UTRAN-GPS}$ *Change Limit* IE is included in the $T_{UTRAN-GPS}$ *Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of $T_{UTRAN-GPS}$ value (F_n). The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of F_n rises above the threshold indicated by the $T_{UTRAN-GPS}$ *Change Limit* IE. The change of $T_{UTRAN-GPS}$ value (F_n) is calculated according to the following:

$$F_n=0 \text{ for } n=0$$

$$F_n = (M_n - M_{n-1}) \text{ mod } 37152912000000 - ((SFN_n - SFN_{n-1}) \text{ mod } 4096) * 10 * 3.84 * 10^3 * 16 + F_{n-1}$$

$$\text{for } n > 0$$

F_n is the change of the $T_{UTRAN-GPS}$ value expressed in unit [1/16 chip] when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M_{n-1} is the previous measurement result received after point C in the measurement model [25], measured at SFN_{n-1}.

M_j is the first measurement result received after point C in the measurement model [25], after first Common Measurement Reporting at initiation or after the last event was triggered.

M_0 is equal to the value reported in the first Common Measurement Reporting at initiation or in the Common Measurement Reporting when the event was triggered.

If the *Predicted T_{UTRAN-GPS} Deviation Limit* IE is included in the *T_{UTRAN-GPS} Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the P_n and F_n . The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when F_n rises above the threshold indicated by the *Predicted T_{UTRAN-GPS} Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$$P_n = b \text{ for } n=0$$

$$P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096)/100 + ((SFN_n - SFN_{n-1}) \bmod 4096) * 10 * 3.84 * 10^3 * 16 + P_{n-1}) \bmod 37158912000000 \text{ for } n > 0$$

$$F_n = \min((M_n - P_n) \bmod 37158912000000, (P_n - M_n) \bmod 37158912000000) \text{ for } n > 0$$

P_n is the predicted T_{UTRAN-GPS} value when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported T_{UTRAN-GPS} Drift Rate value.

b is the last reported T_{UTRAN-GPS} value.

F_n is the deviation of the last measurement result from the predicted T_{UTRAN-GPS} value (P_n) when n measurements has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M_j is the first measurement result received after point C in the measurement model [25], after first Common Measurement Reporting at initiation or after the last event was triggered.

The T_{UTRAN-GPS} Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

2. If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference':

If the *SFN-SFN Change Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of SFN-SFN value (F_n). The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when F_n rises above the threshold indicated by the *SFN-SFN Change Limit* IE. The change of the SFN-SFN value is calculated according to the following:

$$F_n = 0 \text{ for } n=0$$

$$[\text{FDD} - F_n = (M_n - a) \bmod 614400 \text{ for } n > 0]$$

$$[\text{TDD} - F_n = (M_n - a) \bmod 40960 \text{ for } n > 0]$$

F_n is the change of the SFN-SFN

value expressed in unit [1/16 chip] when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN .

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M_j is the first measurement result received after point C in the measurement model [25] after first Common Measurement Reporting at initiation or after the last event was triggered.

If the *Predicted SFN-SFN Deviation Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the P_n and F_n . The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when the F_n rises above the threshold indicated by the *Predicted SFN-SFN Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$$P_n = b \quad \text{for } n=0$$

$$[\text{FDD} - P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096)/100 + P_{n-1}) \bmod 614400 \quad \text{for } n>0$$

$$F_n = \min((M_n - P_n) \bmod 614400, (P_n - M_n) \bmod 614400) \quad \text{for } n>0]$$

$$[\text{TDD} - P_n = ((a/16) * (15*(SFN_n - SFN_{n-1}) \bmod 4096 + (TS_n - TS_{n-1}))/1500 + P_{n-1}) \bmod 40960 \quad \text{for } n>0$$

$$F_n = \min((M_n - P_n) \bmod 40960, (P_n - M_n) \bmod 40960) \quad \text{for } n>0]$$

P_n is the predicted *SFN-SFN* value when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN Drift Rate value.

b is the last reported SFN-SFN value.

abs denotes the absolute value.

F_n is the deviation of the last measurement result from the predicted *SFN-SFN* value (P_n) when n measurements has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at the [TDD -Time Slot TS_n] of the Frame SFN_n.

M_j is the first measurement result received after point C in the measurement model [25] after first Common Measurement Reporting at initiation or after the last event was triggered.

The SFN-SFN Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

If the *Report Characteristics* IE is not set to 'On-Demand', the Node B is required to perform reporting for a common measurement object, in accordance with the conditions provided in the COMMON MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no common measurement object(s) for which a measurement is defined exists any more the Node B shall terminate the measurement locally without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Common Measurement Reporting procedure immediately, and then continue with the measurements as specified in the COMMON MEASUREMENT INITIATION REQUEST message.

Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows:

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the COMMON MEASUREMENT INITIATION RESPONSE, COMMON MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n)

$a = 1/2^{(k/2)}$, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

Common measurement accuracy

If the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS', then the Node B shall use the *UTRAN GPS Timing Measurement Accuracy Class* IE included in the *Common Measurement Accuracy* IE according to the following:

If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates 'Class A', then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes A, B and C.

If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates 'Class B', then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes B and C.

If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates 'Class C' then the Node B shall perform the measurements with the accuracy according to class C.

Response message

If the Node B was able to initiate the measurement requested by the CRNC it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message sent over the Node B control port. The message shall include the same Measurement ID that was used in the measurement request. Only in the case when the *Report Characteristics* IE is set to "On-Demand", or "On Modification", the COMMON MEASUREMENT INITIATION RESPONSE message shall contain the measurement result and also the *Common Measurement Achieved Accuracy* IE if the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS'.

If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference' and the *Report Characteristics* IE is set to 'On Demand' or "On Modification", all the available measurement results shall be reported in the *Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE in the *SFN-SFN Measurement Value Information* IE and the Node B shall indicate in the *Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE all the remaining neighbouring cells with no measurement result available in the COMMON MEASUREMENT INITIATION RESPONSE message.

8.2.8.3 Unsuccessful Operation

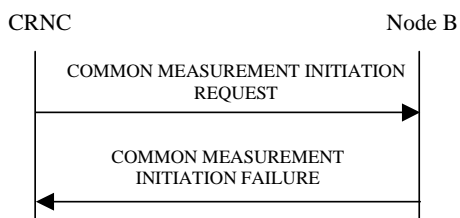


Figure 12: Common Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a COMMON MEASUREMENT INITIATION FAILURE message sent over the Node B control port. The message shall include the same Measurement ID that was used in the COMMON MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Measurement not supported for the object.
- Measurement Temporarily not Available

8.2.8.4 Abnormal Conditions

If the Common Measurement Type received in the *Common Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Common Measurement Object Type received in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message the Node B shall regard the Common Measurement Initiation procedure as failed.

[TDD - If the common measurement type requires the Time Slot Information but the [3.84Mcps TDD - *Time Slot* IE] [1.28Mcps TDD - - *Time SlotLCR* IE] is not provided in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message the Node B shall regard the Common Measurement Initiation procedure as failed.]

If the COMMON MEASUREMENT INITIATION REQUEST message contains the *SFN-SFN Measurement Threshold Information* IE (in the *Measurement Threshold* IE contained in the *Report Characteristics* IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the COMMON MEASUREMENT INITIATION REQUEST message contains the $T_{UTRAN-GPS}$ *Measurement Threshold Information* IE (in the *Measurement Threshold* IE contained in the *Report Characteristics* IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference', but the *Neighbouring Cell Measurement Information* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

If the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS', but the $T_{UTRAN-GPS}$ *Measurement Accuracy Class* IE in the *Common Measurement Accuracy* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

The allowed combinations of the Common measurement type and Report characteristics type are shown in the table below marked with "X". For not allowed combinations, the Node B shall regard the Common Measurement Initiation procedure as failed.

Table 4: Allowed Common measurement type and Report characteristics type combinations

Common measurement type	Report characteristics type								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
Received total wide band power	X	X	X	X	X	X	X	X	
Transmitted Carrier Power	X	X	X	X	X	X	X	X	
Acknowledged PRACH preambles	X	X	X	X	X	X	X	X	
UL Timeslot ISCP	X	X	X	X	X	X	X	X	
Acknowledged PCPCH Access Preambles	X	X	X	X	X	X	X	X	
Detected PCPCH Access Preambles	X	X	X	X	X	X	X	X	
UTRAN GPS Timing of Cell Frames for LCS	X	X							X
SFN-SFN Observed Time Difference	X	X							X

If the SFN IE is included in the COMMON MEASUREMENT INITIATION REQUEST message and the Report Characteristics IE is other than "Periodic", "On Demand" or "On Modification", the Node B shall regard the Common Measurement Initiation procedure as failed.

8.3.8 Dedicated Measurement Initiation

8.3.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on dedicated resources in a Node B.

The Dedicated Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.8.2 Successful Operation

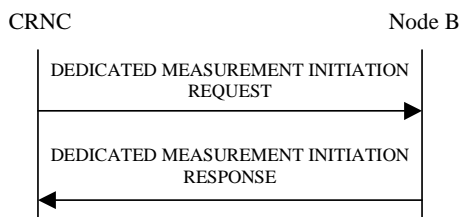


Figure 38: Dedicated Measurement Initiation procedure, Successful Operation

The procedure is initiated with a DEDICATED MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the communication control port assigned to the Node B communication context.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below the meaning of the parameters are given in other specifications.

If the *Node B Communication Context ID* IE equals the reserved value 'All NBCC', this measurement request shall apply for all current and future Node B Communication Contexts controlled via the Communication Control Port on which the DEDICATED MEASUREMENT INITIATION REQUEST message was received. Otherwise, this measurement request shall apply for the requested Node B Communication Context ID only.

If the *Node B Communication Context ID* IE equals the reserved value 'All NBCC', the measurement request shall be treated as a single measurement, despite applying to multiple contexts. This means that it may only be terminated or failed on 'All NBCC'.

If the *Node B Communication Context ID* IE equals the reserved value 'All NBCC', the measurement shall be initiated only for those Node B Communication Contexts handling a mode (FDD, 3.84Mcps TDD or 1.28Mcps TDD) for which the concerned measurement is specified in [4] and [5].

If the *Dedicated Measurement Object Type* IE is set to "RL", measurement results shall be reported for all indicated Radio Links.

[FDD – If the *Dedicated Measurement Object Type* IE is set to "RLS", measurement results shall be reported for all indicated Radio Link Sets.]

[FDD - If the *Dedicated Measurement Object Type* IE is set to "ALL RL", measurement results shall be reported for all current and future Radio Links within the Node B Communication Context.]

[TDD - If the *Dedicated Measurement Object Type* IE is set to "ALL RL", measurement results shall be reported for one existing DPCH per CCTrCH in each used time slot of current and future Radio Links within the Node B Communication Context, provided the measurement type is applicable to the respective DPCH.]

[FDD – If the *Dedicated Measurement Object Type* IE is set to "ALL RLS", measurement results shall be reported for all existing and future Radio Link Sets within the Node B Communication Context.]

[TDD – If the *DPCH ID* IE is provided within the RL Information the measurement request shall apply for the requested physical channel individually. If no *DPCH ID* IE and no *PUSCH Information* IE is provided within the RL Information the measurement request shall apply for one existing physical channel per CCTrCH in each used time slot of the Radio Link, provided the measurement type is applicable to this physical channel.]

[TDD – If the *PUSCH Information* IE is provided within the RL Information the measurement request shall apply for the requested physical channel individually.]

If the *CFN Reporting Indicator* IE is set to "FN Reporting Required", the *CFN* IE shall be included in the measurement report or in the measurement response, the latter only in the case the *Report Characteristics* IE is set to 'On-Demand'. The reported CFN shall be the CFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25].

~~If the *CFN* IE is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].~~

Report characteristics

The *Report Characteristics* IE is set to how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to 'On-Demand' and if the *CFN* IE is not provided, the Node B shall return the result of the measurement immediately. ~~If the *CFN* IE is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].~~

If the *Report Characteristics* IE is set to 'Periodic', the Node B shall periodically initiate the Dedicated Measurement Report procedure for this measurement, with the requested report frequency. ~~If the *CFN* IE is provided, it indicates the frame for which the first measurement value of a periodic reporting shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].~~

If the *Report Characteristics* IE is set to 'Event A', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event B', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event C', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event D', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event E', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to 'Event F', the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is not set to 'On-Demand', the Node B is required to perform reporting for a dedicated measurement object, in accordance with the conditions provided in the DEDICATED MEASUREMENT INITIATION

REQUEST message, as long as the object exists. If no dedicated measurement object(s) for which a measurement is defined exists any more the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Dedicated Measurement Reporting procedure immediately, and then continue with the measurements as specified in the DEDICATED MEASUREMENT INITIATION REQUEST message.

Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the DEDICATED MEASUREMENT INITIATION RESPONSE, DEDICATED MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n)

$a = 1/2^{(k/2)}$, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

Response message

If the Node B was able to initiate the measurement requested by the CRNC, it shall respond with the DEDICATED MEASUREMENT INITIATION RESPONSE message using the communication control port assigned to the Node B communication context. The message shall include the same Measurement ID that was used in the measurement request.

Only in the case when *Report Characteristics* IE is set to "On-Demand", the DEDICATED MEASUREMENT INITIATION RESPONSE message shall contain the measurement result. In this case also the *Dedicated Measurement Object* IE shall be included if it was included in the request message.

In the case that the *Node B Communication Context ID* IE is set to 'All NBCC', the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE shall be set to the value 'All CRNCCC', which is reserved for this purpose.

Interaction with Reset Procedure

If a measurement has been requested with the *Node B Communication Context ID* IE set to 'All NBCC', the Node B shall terminate the measurement locally if either the CRNC or the Node B initiates the Reset procedure for the relevant Communication Control Port or the entire Node B.

8.3.8.3 Unsuccessful Operation

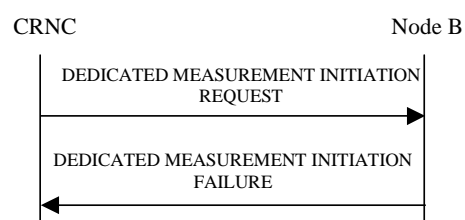


Figure 39: Dedicated Measurement Request procedure: Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a DEDICATED MEASUREMENT INITIATION FAILURE message using the communication control port assigned to the Node B communication context. The message shall include the same Measurement ID that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

In the case that the *Node B Communication Context ID* IE is set to 'All NBCC' the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION FAILURE shall be set to the value 'All CRNCCC', which is reserved for this purpose.

Typical cause values are as follows:

Radio Network Layer cause

- Measurement not supported for the object
- Measurement Temporarily not Available

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.8.4 Abnormal Conditions

The allowed combinations of the Dedicated Measurement Type and Report Characteristics Type are shown in the table below marked with "X". For not allowed combinations, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

Table 4: Allowed Dedicated Measurement Type and Report Characteristics Type combinations

Dedicated Measurement Type	Report Characteristics Type								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
SIR	X	X	X	X	X	X	X	X	
SIR Error	X	X	X	X	X	X	X	X	
Transmitted Code Power	X	X	X	X	X	X	X	X	
RSCP	X	X	X	X	X	X	X	X	
Rx Timing Deviation	X	X	X	X	X	X	X	X	
Round Trip Time	X	X	X	X	X	X	X	X	

If the Dedicated Measurement Type received in the *Dedicated Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Dedicated Measurement Object Type received in the *Dedicated Measurement Object Type* IE in the DEDICATED MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

If the *CFN* IE is included in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Report Characteristics* IE is other than "Periodic" or "On Demand", the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

CHANGE REQUEST

⌘ **25.433 CR 663** ⌘ rev **-** ⌘ Current version: **3.9.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Clarification on definition of TFCI 0 in TDD		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May 2002
Category:	⌘ F	Release:	⌘ R99
<p>Use <u>one</u> of the following categories:</p> <p>F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p>	

Reason for change:	⌘ RAN 1 has defined in 25.224 that TFCI 0 is used to signal the special burst over the Uu interface. In WG2 the TFCS is defined to start with TFCI 1 in TDD. However in NBAP and RNSAP the TFCS definition starts with TFCI 0 for TDD, making it unclear the meaning of this defined TFCI 0.
Summary of change:	⌘ The TFCS table is clarified that the first entry should be ignored in TDD mode since the only possible way that the system can work with the current signalling is that the receiver ignores the entry for TFCI 0.
Consequences if not approved:	⌘ How to handle the definition of TFCI is unclear. Impact assessment towards the previous version of the specification (same release): This CR has no impact towards the previous version of the specification for implementations assuming the proposed change, as this change fills a lack of the specification. For implementations following other principles, this CR may have impact, isolated or not depending on single implementation choices.

Clauses affected:	⌘ 9.2.1.58		
Other specs affected:	⌘ <input checked="" type="checkbox"/> Other core specifications	⌘	TS 25.433 v4.4.0 CR664 TS 25.433 v5.0.0 CR665 TS 25.423 v3.9.0 CR630 TS 25.423 v4.4.0 CR631 TS 25.423 v5.0.0 CR632
	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘		

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ☞ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.2.1.58 TFCS (Transport Format Combination Set)

The Transport Format Combination Set is defined as a set of Transport Format Combinations on a Coded Composite Transport Channel. It is the allowed Transport Format Combinations of the corresponding Transport Channels. The DL Transport Format Combination Set is applicable for DL Transport Channels.

[FDD - Where the UE is assigned access to one or more DSCH transport channels then the UTRAN has the choice of two methods for signalling the mapping between TFCI(field 2) values and the corresponding TFC:

Method #1 - TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given transport format combination (value of CTFC(field2)). The CTFC(field2) value specified in the first group applies for all values of TFCI(field 2) between 0 and the specified 'Max TFCI(field2) value'. The CTFC(field2) value specified in the second group applies for all values of TFCI(field 2) between the 'Max TFCI(field2) value' specified in the last group plus one and the specified 'Max TFCI(field2) value' in the second group. The process continues in the same way for the following groups with the TFCI(field 2) value used by the UE in constructing its mapping table starting at the largest value reached in the previous group plus one.

Method #2 - Explicit

The mapping between TFCI(field 2) value and CTFC(field2) is spelt out explicitly for each value of TFCI (field2)]

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE <i>DSCH</i> > <i>No split in TFCI</i>				This choice is made if : a) The TFCS refers to the uplink OR b) The mode is FDD and none of the Radio Links of the concerned UE are assigned any DSCH transport channels OR c) The mode is TDD
>>TFCS		1 to <maxnoofTFCs>		The first instance of the parameter corresponds to TFCI zero, the second to 1 and so on. [TDD – The first entry (for TFCI 0) should be ignored by the receiver.]
>>>CTFC	M		INTEGER(0..MaxCTFC)	See Note 1.
>>>CHOICE Gain Factors	C-PhysChan			
>>>>Signalled Gain Factors				
>>>>>CHOICE Mode				
>>>>>>FDD				
>>>>>>>Gain Factor β_c	M		Integer (0..15)	For UL DPCCCH or control part of PRACH or control part of PCPCH in FDD; mapping in accordance to [9]
>>>>>>>Gain Factor β_D	M		Integer (0..15)	For UL DPDCH or data part of PRACH or data part of PCPCH in FDD; mapping in accordance to [9]
>>>>>>>TDD				
>>>>>>>>Gain Factor β	M		Integer (0..15)	For UL DPCH in TDD; mapping in accordance to [20]
>>>>>>>>Reference TFC nr	O		Integer (0..3)	If this TFC is a reference TFC, this IE indicates the reference number
>>>>>Computed Gain Factors				
>>>>>>>>Reference TFC nr	M		Integer (0..3)	Indicates the reference TFC to be used to calculate the gain factors for this TFC
> <i>There is a split in the TFCI</i>				This choice is made if : a) The TFCS refers to the downlink AND b) The mode is FDD and one of the Radio Links of the concerned UE is assigned one or more DSCH transport channels
>>Transport format combination_DCH		1 to <MaxTFCI_1_Comb>		The first instance of the parameter <i>Transport format combination_DCH</i> corresponds to TFCI (field 1) = 0, the second to TFCI (field 1) = 1 and so on.
>>>CTFC(field1)	M		Integer(0..MaxCTFC)	See Note 1.
>>Choice Signalling method				

>>>TFCI range				
>>>>TFC mapping on DSCH		1 to <MaxNoTFCIGroups>		
>>>>>Max TFCI(field2) value	M		Integer(1..1023)	This is the Maximum value in the range of TFCI(field2) values for which the specified CTFC(field2) applies
>>>>>CTFC(field2)	M		Integer(0..MaxCTFC)	See Note 1.
>>>Explicit				
>>>>Transport format combination_DSCH		1 to <MaxTFCI_2_Combs>		The first instance of the parameter <i>Transport format combination_DSCH</i> corresponds to TFCI (field2) = 0, the second to TFCI (field 2) = 1 and so on.
>>>>>CTFC(field2)	M		Integer(0..MaxCTFC)	See Note 1.

Condition	Explanation
PhysChan	The IE shall be present if the TFCS concerns a UL DPCH or PRACH channel [FDD – or PCPCH channel].

Range bound	Explanation
MaxnoofTFCs	The maximum number of Transport Format Combinations.
MaxTFCI_1_Combs	Maximum number of TFCI (field 1) combinations (given by 2 raised to the power of the length of the TFCI (field 1))
MaxTFCI_2_Combs	Maximum number of TFCI (field 2) combinations (given by 2 raised to the power of the length of the TFCI (field 2))
MaxNoTFCIGroups	Maximum number of groups, each group described in terms of a range of TFCI(field 2) values for which a single value of CTFC(field2) applies
MaxCTFC	Maximum number of the CTFC value is calculated according to the following: $\sum_{i=1}^I (L_i - 1)P_i$ with the notation according to ref. [18]

Note 1:

The CTFC is an integer number calculated in accordance with [18], subclause 14.10. Regarding the channel ordering, for all transport channels, ‘TrCH1’ corresponds to the transport channel having the lowest transport channel identity among all configured transport channels on this CCTrCH. ‘TrCH2’ corresponds to the transport channel having the next lowest transport channel identity, and so on.

CHANGE REQUEST

⌘ **25.433 CR 664** ⌘ rev **-** ⌘ Current version: **4.4.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Clarification on definition of TFCI 0 in TDD		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May 2002
Category:	⌘ A	Release:	⌘ REL-4
<p>Use <u>one</u> of the following categories:</p> <p>F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p>	

Reason for change:	⌘ RAN 1 has defined in 25.224 that TFCI 0 is used to signal the special burst over the Uu interface. In WG2 the TFCS is defined to start with TFCI 1 in TDD. However in NBAP and RNSAP the TFCS definition starts with TFCI 0 for TDD, making it unclear the meaning of this defined TFCI 0.
Summary of change:	⌘ The TFCS table is clarified that the first entry should be ignored in TDD mode since the only possible way that the system can work with the current signalling is that the receiver ignores the entry for TFCI 0.
Consequences if not approved:	⌘ How to handle the definition of TFCI is unclear. Impact assessment towards the previous version of the specification (same release): This CR has no impact towards the previous version of the specification for implementations assuming the proposed change, as this change fills a lack of the specification. For implementations following other principles, this CR may have impact, isolated or not depending on single implementation choices.

Clauses affected:	⌘ 9.2.1.58		
Other specs affected:	⌘ <input checked="" type="checkbox"/> Other core specifications	⌘	TS 25.433 v3.9.0 CR663 TS 25.433 v5.0.0 CR665 TS 25.423 v3.9.0 CR630 TS 25.423 v4.4.0 CR631 TS 25.423 v5.0.0 CR632
	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘		

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ☞ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.2.1.58 TFCS (Transport Format Combination Set)

The Transport Format Combination Set is defined as a set of Transport Format Combinations on a Coded Composite Transport Channel. It is the allowed Transport Format Combinations of the corresponding Transport Channels. The DL Transport Format Combination Set is applicable for DL Transport Channels.

[FDD - Where the UE is assigned access to one or more DSCH transport channels then the UTRAN has the choice of two methods for signalling the mapping between TFCI(field 2) values and the corresponding TFC:

Method #1 - TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given transport format combination (value of CTFC(field2)). The CTFC(field2) value specified in the first group applies for all values of TFCI(field 2) between 0 and the specified 'Max TFCI(field2) value'. The CTFC(field2) value specified in the second group applies for all values of TFCI(field 2) between the 'Max TFCI(field2) value' specified in the last group plus one and the specified 'Max TFCI(field2) value' in the second group. The process continues in the same way for the following groups with the TFCI(field 2) value used by the UE in constructing its mapping table starting at the largest value reached in the previous group plus one.

Method #2 - Explicit

The mapping between TFCI(field 2) value and CTFC(field2) is spelt out explicitly for each value of TFCI (field2)]

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE <i>DSCH</i> > <i>No split in TFCI</i>				This choice is made if : a) The TFCS refers to the uplink OR b) The mode is FDD and none of the Radio Links of the concerned UE are assigned any DSCH transport channels OR c) The mode is TDD
>>TFCS		1 to <maxnoofTFCs>		The first instance of the parameter corresponds to TFCI zero, the second to 1 and so on. [TDD – The first entry (for TFCI 0) should be ignored by the receiver.]
>>>CTFC	M		INTEGER(0..MaxCTFC)	See Note 1.
>>>CHOICE Gain Factors	C-PhysChan			
>>>>Signalled Gain Factors				
>>>>>CHOICE Mode				
>>>>>>FDD				
>>>>>>>Gain Factor β_c	M		Integer (0..15)	For UL DPCCCH or control part of PRACH or control part of PCPCH in FDD; mapping in accordance to [9]
>>>>>>>Gain Factor β_D	M		Integer (0..15)	For UL DPDCH or data part of PRACH or data part of PCPCH in FDD; mapping in accordance to [9]
>>>>>>>TDD				
>>>>>>>>Gain Factor β	M		Integer (0..15)	For UL DPCH in TDD; mapping in accordance to [20]
>>>>>>>>Reference TFC nr	O		Integer (0..3)	If this TFC is a reference TFC, this IE indicates the reference number
>>>>>Computed Gain Factors				
>>>>>>>>Reference TFC nr	M		Integer (0..3)	Indicates the reference TFC to be used to calculate the gain factors for this TFC
> <i>There is a split in the TFCI</i>				This choice is made if : a) The TFCS refers to the downlink AND b) The mode is FDD and one of the Radio Links of the concerned UE is assigned one or more DSCH transport channels
>>Transport format combination_DCH		1 to <MaxTFCI_1_Comb>		The first instance of the parameter <i>Transport format combination_DCH</i> corresponds to TFCI (field 1) = 0, the second to TFCI (field 1) = 1 and so on.
>>>CTFC(field1)	M		Integer(0..MaxCTFC)	See Note 1.
>>Choice Signalling method				

>>>TFCI range				
>>>>TFC mapping on DSCH		1 to <MaxNoTFCIGroups>		
>>>>>Max TFCI(field2) value	M		Integer(1..1023)	This is the Maximum value in the range of TFCI(field2) values for which the specified CTFC(field2) applies
>>>>>CTFC(field2)	M		Integer(0..MaxCTFC)	See Note 1.
>>>Explicit				
>>>>Transport format combination_DSCH		1 to <MaxTFCI_2_Combs>		The first instance of the parameter <i>Transport format combination_DSCH</i> corresponds to TFCI (field2) = 0, the second to TFCI (field 2) = 1 and so on.
>>>>>CTFC(field2)	M		Integer(0..MaxCTFC)	See Note 1.

Condition	Explanation
PhysChan	The IE shall be present if the TFCS concerns a UL DPCH or PRACH channel [FDD – or PCPCH channel].

Range bound	Explanation
MaxnoofTFCs	The maximum number of Transport Format Combinations.
MaxTFCI_1_Combs	Maximum number of TFCI (field 1) combinations (given by 2 raised to the power of the length of the TFCI (field 1))
MaxTFCI_2_Combs	Maximum number of TFCI (field 2) combinations (given by 2 raised to the power of the length of the TFCI (field 2))
MaxNoTFCIGroups	Maximum number of groups, each group described in terms of a range of TFCI(field 2) values for which a single value of CTFC(field2) applies
MaxCTFC	Maximum number of the CTFC value is calculated according to the following: $\sum_{i=1}^I (L_i - 1)P_i$ with the notation according to ref. [18]

Note 1:

The CTFC is an integer number calculated in accordance with [18], subclause 14.10. Regarding the channel ordering, for all transport channels, ‘TrCH1’ corresponds to the transport channel having the lowest transport channel identity among all configured transport channels on this CCTrCH. ‘TrCH2’ corresponds to the transport channel having the next lowest transport channel identity, and so on.

CHANGE REQUEST

⌘ **25.433 CR 665** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Clarification on definition of TFCI 0 in TDD		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May 2002
Category:	⌘ A	Release:	⌘ REL-5
<p>Use <u>one</u> of the following categories:</p> <p>F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p>	

Reason for change:	⌘ RAN 1 has defined in 25.224 that TFCI 0 is used to signal the special burst over the Uu interface. In WG2 the TFCS is defined to start with TFCI 1 in TDD. However in NBAP and RNSAP the TFCS definition starts with TFCI 0 for TDD, making it unclear the meaning of this defined TFCI 0.
Summary of change:	⌘ The TFCS table is clarified that the first entry should be ignored in TDD mode since the only possible way that the system can work with the current signalling is that the receiver ignores the entry for TFCI 0.
Consequences if not approved:	⌘ How to handle the definition of TFCI is unclear. Impact assessment towards the previous version of the specification (same release): This CR has no impact towards the previous version of the specification for implementations assuming the proposed change, as this change fills a lack of the specification. For implementations following other principles, this CR may have impact, isolated or not depending on single implementation choices.

Clauses affected:	⌘ 9.2.1.58		
Other specs affected:	⌘ <input checked="" type="checkbox"/> Other core specifications	⌘	TS 25.433 v3.9.0 CR663 TS 25.433 v4.4.0 CR664 TS 25.423 v3.9.0 CR630 TS 25.423 v4.4.0 CR631 TS 25.423 v5.0.0 CR632
	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘		

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9.2.1.58 TFCS (Transport Format Combination Set)

The Transport Format Combination Set is defined as a set of Transport Format Combinations on a Coded Composite Transport Channel. It is the allowed Transport Format Combinations of the corresponding Transport Channels. The DL Transport Format Combination Set is applicable for DL Transport Channels.

[FDD - Where the UE is assigned access to one or more DSCH transport channels then the UTRAN has the choice of two methods for signalling the mapping between TFCI(field 2) values and the corresponding TFC:

Method #1 - TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given transport format combination (value of CTFC(field2)). The CTFC(field2) value specified in the first group applies for all values of TFCI(field 2) between 0 and the specified 'Max TFCI(field2) value'. The CTFC(field2) value specified in the second group applies for all values of TFCI(field 2) between the 'Max TFCI(field2) value' specified in the last group plus one and the specified 'Max TFCI(field2) value' in the second group. The process continues in the same way for the following groups with the TFCI(field 2) value used by the UE in constructing its mapping table starting at the largest value reached in the previous group plus one.

Method #2 - Explicit

The mapping between TFCI(field 2) value and CTFC(field2) is spelt out explicitly for each value of TFCI (field2)]

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE <i>DSCH</i> > <i>No split in TFCI</i>				This choice is made if : a) The TFCS refers to the uplink OR b) The mode is FDD and none of the Radio Links of the concerned UE are assigned any DSCH transport channels OR c) The mode is TDD
>>TFCS		1 to <maxnoofTFCs>		The first instance of the parameter corresponds to TFCI zero, the second to 1 and so on. [TDD – The first entry (for TFCI 0) should be ignored by the receiver.]
>>>CTFC	M		INTEGER(0..MaxCTFC)	See Note 1.
>>>CHOICE Gain Factors	C-PhysChan			
>>>>Signalled Gain Factors				
>>>>>CHOICE Mode				
>>>>>>FDD				
>>>>>>>Gain Factor β_c	M		Integer (0..15)	For UL DPCCCH or control part of PRACH or control part of PCPCH in FDD; mapping in accordance to [9]
>>>>>>>Gain Factor β_D	M		Integer (0..15)	For UL DPDCH or data part of PRACH or data part of PCPCH in FDD; mapping in accordance to [9]
>>>>>>>TDD				
>>>>>>>>Gain Factor β	M		Integer (0..15)	For UL DPCH in TDD; mapping in accordance to [20]
>>>>>>>>Reference TFC nr	O		Integer (0..3)	If this TFC is a reference TFC, this IE indicates the reference number
>>>>>Computed Gain Factors				
>>>>>>>>Reference TFC nr	M		Integer (0..3)	Indicates the reference TFC to be used to calculate the gain factors for this TFC
> <i>There is a split in the TFCI</i>				This choice is made if : a) The TFCS refers to the downlink AND b) The mode is FDD and one of the Radio Links of the concerned UE is assigned one or more DSCH transport channels
>>Transport format combination_DCH		1 to <MaxTFCI_1_Comb>		The first instance of the parameter <i>Transport format combination_DCH</i> corresponds to TFCI (field 1) = 0, the second to TFCI (field 1) = 1 and so on.
>>>CTFC(field1)	M		Integer(0..MaxCTFC)	See Note 1.
>>Choice Signalling method				

>>>TFCI range				
>>>>TFC mapping on DSCH		1 to <MaxNoTFCIGroups>		
>>>>>Max TFCI(field2) value	M		Integer(1..1023)	This is the Maximum value in the range of TFCI(field2) values for which the specified CTFC(field2) applies
>>>>>CTFC(field2)	M		Integer(0..MaxCTFC)	See Note 1.
>>>Explicit				
>>>>Transport format combination_DSCH		1 to <MaxTFCI_2_Combs>		The first instance of the parameter <i>Transport format combination_DSCH</i> corresponds to TFCI (field2) = 0, the second to TFCI (field 2) = 1 and so on.
>>>>>CTFC(field2)	M		Integer(0..MaxCTFC)	See Note 1.

Condition	Explanation
PhysChan	The IE shall be present if the TFCS concerns a UL DPCH or PRACH channel [FDD – or PCPCH channel].

Range bound	Explanation
MaxnoofTFCs	The maximum number of Transport Format Combinations.
MaxTFCI_1_Combs	Maximum number of TFCI (field 1) combinations (given by 2 raised to the power of the length of the TFCI (field 1))
MaxTFCI_2_Combs	Maximum number of TFCI (field 2) combinations (given by 2 raised to the power of the length of the TFCI (field 2))
MaxNoTFCIGroups	Maximum number of groups, each group described in terms of a range of TFCI(field 2) values for which a single value of CTFC(field2) applies
MaxCTFC	Maximum number of the CTFC value is calculated according to the following: $\sum_{i=1}^I (L_i - 1)P_i$ with the notation according to ref. [18]

Note 1:

The CTFC is an integer number calculated in accordance with [18], subclause 14.10. Regarding the channel ordering, for all transport channels, 'TrCH1' corresponds to the transport channel having the lowest transport channel identity among all configured transport channels on this CCTrCH. 'TrCH2' corresponds to the transport channel having the next lowest transport channel identity, and so on.

CHANGE REQUEST

⌘ **25.433 CR 668** ⌘ rev **2** ⌘ Current version: **3.9.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ NBAP Review – Alignment on the ASN.1		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May 2002
Category:	⌘ F	Release:	⌘ R99
	<p>Use <u>one</u> of the following categories:</p> <p>F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)</p>

Reason for change:	⌘ The tabular format is not fully aligned on the ASN.1 description.
Summary of change:	<p>⌘ This CR corrects the tabular format to align it to the ASN.1 specification. This CR also corrects editorial errors in the specification. Below is the list of all the corrections that are not purely editorial.</p> <p><u>R2 Corrections (highlighted in light gray):</u></p> <ul style="list-style-type: none"> - subclause 9.2.2.25 (PDSCH Code Mapping): It is indicated that the maximum value of the Code Number is the "Spreading Factor - 1". This handles the particular case where the selected value is "256" as well as all the other cases. - subclause 9.2.2.42: Alignment to the actual name of the Information Element. <p><u>R1 Corrections (highlighted in light blue):</u></p> <ul style="list-style-type: none"> - "Hysterisis" corrected to "Hysteresis". Applied in the following subclauses: 8.2.8, 8.3.8, New 9.2.1.41A, - References to the <i>Diversity Indication</i> IE in the procedure text are removed to be in line with the correction removing this IE. Applied in the following subclauses: 8.2.17.2, 8.3.1.2. - Sentences linking the start of reception on the Uu and the sending of the RADIO LINK SETUP/ADDITION RESPONSE on the lub are removed. A sentence is added to handle when the reception on the Uu should be started. Applied in the following subclauses: 8.2.17.2, 8.3.1.2. - A sentence is included to indicate when the Node B shall include the <i>Communication Control Port Id</i> IE. Applied in the following subclauses: 8.2.17.3. - The <i>Diversity Indication</i> IE and the corresponding condition are removed from the tabular format. Applied in the following subclauses:

9.1.37.1, 9.1.38.1.

- The *Diversity Indication* IE is removed from the tabular format. Applied in the following subclauses:
9.1.40.1, 9.1.40.2, 9.1.41.1.

9.2.1.26:

The section describing the *Diversity Indication* IE is voided.

9.2.1.47A:

The sentence describing the IE is corrected.

9.2.2.53B:

The reference is updated to TS 25.213 ([9]) as only this specification holds details on the alternative scrambling code scheme, not RRC (which is currently referenced).

9.3.3:

- The comment on the "diversityIndication" is removed in the following messages:
 - RADIO LINK SETUP RESPONSE FDD.
 - RADIO LINK SETUP FAILURE FDD
 - RADIO LINK ADDITION RESPONSE FDD
 - RADIO LINK ADDITION RESPONSE TDD
 - RADIO LINK ADDITION FAILURE FDD.

R0 Corrections (highlighted in yellow):

7:

Clarification for the Common and Dedicated Measurement functions.

8.1:

Removal of the usage of the "UE Context" terminology (replaced by "Node B Communication Context").

8.2.1:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to use the name of the IE and to clarify the channels to be configured and activated.

8.2.2:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to use the name of the IE and to clarify the channels to be configured and activated.

8.2.3:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to use the name of the IE and to clarify the channels to be configured and activated.

8.2.4:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to remove specification text that is handled by the Conditional Presence of the *Shutdown Timer* IE.

8.2.5:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to reflect the fact that the resource that is unblocked is always a Cell (by means of the *C-ID* IE).

8.2.6:

- Clarification of the Port to be used for the procedure.

8.2.7:

- Clarification of the Port to be used for the procedure.

8.2.8:

- References to the *Common Measurement Object Type* IE in the procedure text are removed to be in line with the correction removing this IE (see 9.1.18 & 9.2.1.10).

- The procedure text is changed to use the proper names of the messages and the IEs that are used.

8.2.9:

- The procedure text is changed to use the proper name of IEs (in this case the *Measurement ID* IE).

8.2.10:

- The procedure text is changed to use the proper name of IEs (in this case the *Measurement ID* IE).

8.2.12:

- Clarification of the Port to be used for the procedure.
- Clarification in the Abnormal Conditions.

8.2.13:

- Clarification of the Port to be used for the procedure.
- Clarification of the IEs used in the Synchronisation Configuration.

8.2.14:

- Clarification of the Port to be used for the procedure.

8.2.15.2:

- Clarification of the Port to be used for the procedure.
- References to the *Indication Type* IE in the procedure text are removed to be in line with the correction removing this IE (see 9.1.32 & 9.2.1.36).

8.2.16:

- Clarification of the Port to be used for the procedure.
- The procedure text for the Unsuccessful Operation is slightly changed.

8.2.17:

- Clarification of the Port to be used for the procedure.
- The procedure text is corrected as DCHs are not added in the Radio Link Setup procedure.
- The procedure text for the RADIO LINK SETUP RESPONSE in the case of combining is changed as the *Reference RL ID* IE does not exist and the *RL ID* IE indicating one RL with which the concerned RL is combined is mandatory in this case
- Usage of the proper terminology "set of co-ordinated DCHs".
- Clarification that the N_OUTSYNC_IND and T_RLFAILURE parameters are used for the out-of-synch algorithm and the N_INSYNCH_IND parameter is used for the in-synch algorithm.
- Removal of redundant text on the beginning of reception of new RLs.

8.2.18:

- Clarification of the Port to be used for the procedure.
- The procedure text is corrected for the case of the PDSCH/PUSCH Deletion.

8.3.1:

- Clarification of the Port to be used for the procedure.
- The procedure text is corrected to use the name of the IEs that are actually used (in this case *RL ID*, *Transport Layer Address*, *Binding ID*).
- The procedure text for the RADIO LINK ADDITION RESPONSE in the case of combining is changed to reflect the fact that the *RL ID* IE indicates one RL with which the concerned RL is combined.
- Usage of the proper terminology "set of co-ordinated DCHs".
- References to the UE are replaced by Node B Communication Context where applicable.
- Clarification that the N_OUTSYNC_IND and T_RLFAILURE parameters are used for the out-of-synch algorithm and the N_INSYNCH_IND parameter is used for the in-synch algorithm.
- Clarification as to when the Unsuccessful Operation shall be used.

- Appropriate FDD tagging for the case of a "partly" unsuccessful Radio Link Addition.

8.3.2:

- References to the UE are replaced by Node B Communication Context where applicable.
- The procedure text is corrected to use the name of the IEs that are actually used (in this case *Transport Layer Address*, *Binding ID*).

8.3.5:

- Corrections for DCHs that are added and not modified.

8.3.6:

- Clarification of the Port to be used for the procedure.
- Clarification that the N_OUTSYNC_IND and T_RLFAILURE parameters are used for the out-of-synch algorithm and the N_INSYNCH_IND parameter is used for the in-synch algorithm.

8.3.7:

- Clarification of the Port to be used for the procedure.
- References to the UE are replaced by Node B Communication Context where applicable.

8.3.8:

- References to the *Dedicated Measurement Object Type* IE in the procedure text are removed to be in line with the correction removing this IE (see 9.1.52 & 9.2.1.24).
- The procedure text is changed to use the proper names of the messages and IEs that are used.

8.3.9:

- The procedure text is changed to use the proper name of IEs (in this case the *Measurement ID* IE).
- Inclusion of the references to 25.123 and 25.133 (in line with the existing text in the Common Measurement procedures).

8.3.10:

- The procedure text is changed to use the proper name of IEs (in this case the *Measurement ID* IE).

8.3.12:

- Clarification of the Port to be used for the procedure.
- References to the UE are replaced by Node B Communication Context where applicable.

8.3.13:

- Clarification of the Port to be used for the procedure.

8.3.14:

- References to the UE are replaced by Node B Communication Context where applicable.
- Clarification of how the procedure is initiated and which Port is used.

8.3.15:

- Clarification of the Port to be used for the procedure.

8.3.16:

- Clarification of the Port to be used for the procedure.

9.1 General Correction:

Everywhere where applicable the *Transaction ID* IE has been moved just after the *Message Type* IE in the tabular format (for all messages in subclauses from 9.1.36.1 to 9.1.61 included & subclause 9.1.67). This is in line with the ASN.1 definition where the *Transaction ID* IE is defined as part of the "header" of the message whereas the *Node B Communication Context* IE and/or *CRNC Communication Context* IE are part of the message PDU.

9.1.3.1:

One indentation added to *AICH Parameters* IE. This is an alignment on the ASN.1.

9.1.17:

Correction to the reference of the *BCH Information* IE (this is a Transport Channel, not a Physical Channel).

9.1.18:

The *Common Measurement Object Type* IE is removed, only the choice remains. This correction is line with the way the Common Measurement Object Type is handled in the COMMON MEASUREMENT INITIATION RESPONSE and COMMON MEASUREMENT REPORT messages.

9.1.19:

Criticality of the "Cell" Choice Tag is corrected from "YES" to "-".

9.1.27.1:

Criticality of the *Secondary CPICH Information* IE is corrected from "YES" to "EACH".

9.1.32:

Indication Type IE is removed, only the choice remains.

9.1.42.1:

- The Criticality of the *DSCH To Modify* IE is corrected from "YES" to "EACH".
- The Criticality of the *DSCH To Delete* IE is corrected from "YES" to "EACH".

9.1.51:

The presence of the *DL Reference Power Information* IE is corrected from "GLOBAL" to "EACH" to be in line with the ASN.1.

9.1.52:

The *Dedicated Measurement Object Type* IE is removed, only the choice remains. This correction is line with the way the Dedicated Measurement Object Type is handled in the DEDICATED MEASUREMENT INITIATION RESPONSE and DEDICATED MEASUREMENT REPORT messages.

9.1.53:

The presence of the *RL Set Information* IE has been corrected from "-" to "EACH/ignore" to be in line with the ASN.1 specification.

9.1.58:

The Criticality of the CCTrCH choice tag is corrected from " " to "-".

9.1.59:

- Criticality of the CCTrCH choice tag is corrected from " " to "-".
- Criticality of the *RL Id* IE in the CCTrCH choice tag is corrected from " " to "-".

9.1.62:

Maximum for the sequence in UL Code Information IE in *PUSCH To Modify Information* IE is corrected from "maxnoofPDSCHs" to "maxnoofPUSCHs".

9.1.64:

The Criticality of the *Cause* IE in *Unsuccessful DL Shared Channel Set* IE is corrected from "YES/ignore" to "-".

9.1.68:

Addition of the *Message Discriminator* IE.

9.2.1.1A:

The explanation of the meaning of the values of the *Priority Level* IE is moved to the Semantics Description column.

9.2.1.10:

This subclause on "Common Measurement Object Type" becomes "Void" according to the correction in 9.1.18.

9.2.1.17:

- The *DdMode* IE is reordered and made extensible according to the ASN.1

definition in 9.3.5.

- The tabular format is modified to introduce a "Criticality" and an "Assigned Criticality" column for the last 2 IEs that were introduced in an extension container and thus have a criticality (cf. late R99 corrections).

New 9.2.1.18A:

The tabular format introduced for the *CTFC* IE is in line with the ASN.1 definition in 9.3.5.

9.2.1.22:

This subclause on "Dedicated Measurement Object Type" becomes "Void" according to the correction in 9.1.52.

9.2.1.36:

This subclause on "Indication Type" becomes "Void" according to the correction in 9.1.32, 9.3.3 and 9.3.4).

9.2.1.39:

Definition is corrected from ENUMERATED to INTEGER (in line with the ASN.1).

9.2.1.40:

Definition is corrected from ENUMERATED to INTEGER (in line with the ASN.1).

9.2.1.40A:

This subclause on "Measurement Availability Indicator" becomes "Void" as this IE is not used anywhere in the specification.

New 9.2.1.40B:

The *Measurement Change Time* IE is defined as a CHOICE between INTEGER (1..6000,...) and nothing according to the ASN.1 definition in 9.3.5.

New 9.2.1.41A:

The *Measurement Hysteresis Time* IE is defined as a CHOICE between INTEGER (1..6000,...) and nothing according to the ASN.1 definition in 9.3.5.

9.2.1.45A:

The table has been corrected to remove the "Criticality" and "Assigned Criticality" columns to be in line with the ASN.1 definition (the IE is not defined by a ProtocolIE-Single-Container, but only as part of an extension to the Criticality Diagnostics IE).

9.2.1.46:

The *DdMode* IE is reordered and made extensible according to the ASN.1 definition in 9.3.5.

9.2.1.46A:

The ENUMERATED is corrected into an INTEGER according to the ASN.1 definition in 9.3.5.

9.2.1.49:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.1.49A:

The ENUMERATED is corrected into an INTEGER according to the ASN.1 definition in 9.3.5 (some text is added to the Semantics Description).

9.2.1.51:

- The tabular format definition of the *Report Periodicity* IE is changed to a reference to the newly introduced subclause 9.2.1.51a in order to present a definition in line with the ASN.1 definition (i.e. CHOICE between INTEGER (1..6000,...) and INTEGER (1..60,...), see 9.3.5).

- The tabular format definition of the *Measurement Hysteresis Time* IE is changed to a reference to the newly introduced subclause 9.2.1.41B in order to present a definition in line with the ASN.1 definition (i.e. CHOICE between INTEGER (1..6000,...) and nothing, see 9.3.5).

- The tabular format definition of the *Measurement Change Time* IE is changed to a reference to the newly introduced subclause 9.2.1.40A in order to present a definition in line with the ASN.1 definition (i.e. CHOICE between INTEGER

(1..6000,...) and nothing, see 9.3.5).

New 9.2.1.51a:

The *Report Periodicity* IE is defined as a CHOICE between INTEGER (1..6000,...) and INTEGER (1..60,...) according to the ASN.1 definition in 9.3.5.

9.2.1.56A:

- Alignment to the ASN.1 definition (Integer (0..255)).

9.2.1.58:

- The CTFC IE is encoded differently in the ASN.1 than by a mere INTEGER (0..MaxCTFC), this is aligned by replacing the definition by a reference to a new section 9.2.1.18A. Every piece of text related to this IE is moved to that section.
- Presence (M) of the "CHOICE Mode" is added.

9.2.1.62:

Tabular format structure is modified to be in line with the ASN.1 encoding.

9.2.2.16A:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.22:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.24:

This section is voided as there is no corresponding IE defined in the tabular format in 9.2 or in the ASN.1 in 9.3.

9.2.2.25:

- The definition of the *DL Scrambling Code* IE is replaced by a reference to the subclause in which this IE is defined (9.2.2.13).
- The ENUMERATED defining the *Spreading Factor* IEs (4 different places in the PDSCH Code Mapping IE) is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.26:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.48:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.53B:

The name of the IE in the tabular format is aligned to the IE Name in the subclause title in 9.3.5.

9.2.3.4D:

Tabular format structure is modified to be in line with the ASN.1 encoding in 9.3.5: the IE is not defined using the ProtocolIE-Single-Container, so it has no Criticality in itself => the "Criticality" and the "Assigned Criticality" columns are removed.

9.2.3.7:

Tabular format structure is modified to be in line with the ASN.1 encoding in 9.3.5.

9.2.3.14:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.3.16:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.3.19A:

Tabular format structure is modified to be in line with the ASN.1 encoding in 9.3.5.

9.2.3.26:

A comment is added in the Semantics Description column, in line with the Comment in the ASN.1.

9.3.3:

- In the "Imports", the "IndicationType" is removed as it is not used anywhere in this part of the ASN.1. (see also correction in 9.1.32, 9.2.1.36 and 9.3.4).

- In COMMON MEASUREMENT INITIATION REQUEST message:
 - The comment on the "CommonMeasurementObjectType-CM-Rqst" is removed (in line with the correction in 9.1.18).
- In RESOURCE STATUS INDICATION message:
 - The comment on the "IndicationType-ResourceStatusInd" is removed (in line with the correction in 9.1.32).
- In RADIO LINK RECONFIGURATION PREPARE TDD message:
 - Addition of a comment to indicate that the USCH for TDD only.
- In DEDICATED MEASUREMENT INITIATION REQUEST message:
 - The comment on the "DedicatedMeasurementObjectType-CM-Rqst" is removed (in line with the correction in 9.1.52).
 - A comment is added to indicate that "RLS" and "AIIRLS" choices are "For FDD only".
 - A comment is added to indicated that "DPCH-Id" is "For TDD only".
- In DEDICATED MEASUREMENT INITIATION RESPONSE message:
 - A comment is added to indicate that "RLS" and "AIIRLS" choices are "For FDD only".
 - A comment is added to indicated that "DPCH-Id" is "For TDD only".
- In DEDICATED MEASUREMENT INITIATION RESPONSE message:
 - A comment is added to indicate that "RLS" and "AIIRLS" choices are "For FDD only".
 - A comment is added to indicated that "DPCH-Id" is "For TDD only".

9.3.4:

- Acknowledged-PCPCH-access-preambles:
 - A comment is added in line with the one in the tabular format.
- Acknowledged-PRACH-preambles-Value:
 - The comment is aligned on the one in the tabular format to remove text present in another specification (i.e. use of the referenced specification).
- CommonTransportChannel-InformationResponse:
 - This IE and its definition are moved from the "R" section to the "C" section.
- Compressed-Mode-Deactivation-Flag:
 - The comment is removed as it does not have any meaning anymore.
- Detected-PCPCH-access-preambles:
 - A comment is added in line with the one in the tabular format.
- IndicationType:
 - This IE is removed as it is not used anywhere in the ASN.1. (see also correction in 9.1.32, 9.2.1.36 and 9.3.3).
- LimitedPowerIncrease:
 - This IE and its definition are moved from the "R" section to the "L" section.
- MessageStructure:
 - This IE and its definition are moved from the "C" section to the "M" section.
- Rx-Timing-Deviation-Value:
 - A comment is added in line with the one in the tabular format.
- TFCS-TFCSList (in TFCS):
 - A comment is added in line with the condition in the tabular format.
- Transmitted-Carrier-Power-Value:
 - The references in the comment are updated from [4]/[5] to [22]/[23].
- Transmitted-Code-Power-Value:
 - The references in the comment are updated from [4]/[5] to [22]/[23].

Impact Analysis:

Impact assessment towards the previous version of the specification (same release): this CR has no impact on the previous version of the specification (same release) under either the protocol or functional point of view as the ASN.1 takes precedence on the tabular format and this CR merely aligns the tabular format on the ASN.1.

Consequences if not approved: ⌘ If this CR is not approved, then the discrepancy between the tabular format and the ASN.1 will remain.

Clauses affected: ⌘ All except cover page, 1, 2 and Annex D. This includes the introduction of new subclauses 9.2.1.18A, 9.2.1.40B, 9.2.1.41A, 9.2.1.51a.

Other specs affected:

<input checked="" type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘ TS 25.433 v 4.4.0 CR 669 TS 25.433 v 5.0.0 CR 670
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Other comments: ⌘

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

3 Definitions, **s**Symbols and **a**Abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply.

CRNC Communication Context: The CRNC Communication Context contains the necessary information for the CRNC for communication with a specific UE. The CRNC Communication Context is identified by the CRNC Communication Context ID.

Elementary Procedure: The NBAP protocol consists of Elementary Procedures (EPs). An Elementary Procedure is a unit of interaction between the CRNC and the Node B.

An EP consists of an initiating message and possibly a response message.

Two kinds of EPs are used:

- **Class 1:** Elementary Procedures with response (success or failure).
- **Class 2:** Elementary Procedures without response.

For **Class 1** EPs, the types of responses can be as follows:

Successful

- A signalling message explicitly indicates that the elementary procedure has been successfully completed with the receipt of the response.

Unsuccessful

- A signalling message explicitly indicates that the EP failed.

Class 2 EPs are considered always successful.

Node B Communication Context: The Node B Communication Context contains the necessary information for the Node B for communication with a specific UE. The Node B Communication Context is created by the Radio Link Setup procedure and deleted by the Radio Link Deletion procedure when deleting the last Radio Link within the Node B Communication Context. The Node B Communication Context is identified by the Node B Communication Context ID.

Prepared Reconfiguration: A Prepared Reconfiguration exists when the Synchronised Radio Link Reconfiguration Preparation procedure has been completed successfully. The Prepared Reconfiguration does not exist any more after either of the procedures Synchronised Radio Link Reconfiguration Commit or Synchronised Radio Link Reconfiguration Cancellation has been completed.

3.2 Symbols

Void.

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

AICH	Acquisition Indicator Channel
AP-AICH	Access Preamble Acquisition Indicator Channel
ASN.1	Abstract Syntax Notation One
BCCH	Broadcast Control Channel
CCPCH	Common Control Physical Channel
CFN	Connection Frame Number
CM	Compressed Mode
CPCH	Common Packet Channel

CPICH	Common Pilot Channel
CRNC	Controlling Radio Network Controller
CSICH	CPCH Status Indicator Channel
DCH	Dedicated Channel
DL	Downlink
DPCCH	Dedicated Physical Control Channel
DPCH	Dedicated Physical Channel
DPDCH	Dedicated Physical Data Channel
DSCH	Downlink Shared Channel
FACH	Forward Access Channel
FDD	Frequency Division Duplex
FP	Frame Protocol
ISCP	Interference Signal Code Power
L1	Layer 1
L2	Layer 2
MIB	Master Information Block
NBAP	Node B Application Part
O&M	Operation and Maintenance
PCCPCH	Primary Common Control Physical Channel
PCH	Paging Channel
PCPCH	Physical Common Packet Channel
PDSCH	Physical Downlink Shared Channel
PICH	Paging Indication Channel
PUSCH	Physical Uplink Shared Channel
RACH	Random Access Channel
RL	Radio Link
RLS	Radio Link Set
RNC	Radio Network Controller
RRC	Radio Resource Control
SB	Scheduling Block
SCCPCH	Secondary Common Control Physical Channel
SCH	Synchronisation Channel
SCTD	Space Code Transmit Diversity
SIB	System Information Block
SRNC	Serving Radio Network Controller
SSDT	Site Selection Diversity Transmission
STTD	Space Time Transmit Diversity
TDD	Time Division Duplex
TFC	Transport Format Combination
TFCI	Transport Format Combination Indicator
TFCS	Transport Format Combination Set
TFS	Transport Format Set
TPC	Transmit Power Control
TSTD	Time Switched Transmit Diversity
UARFCN	UTRA Absolute Radio Frequency Channel Number
UE	User Equipment
UL	Uplink
UMTS	Universal Mobile Telecommunications System
USCH	Uplink Shared Channel
UTRA	Universal Terrestrial Radio Access
UTRAN	Universal Terrestrial Radio Access Network

4 General

4.1 Procedure Specification Principles

The principle for specifying the procedure logic is to specify the functional behaviour of the Node B exactly and completely. The CRNC functional behaviour is left unspecified. The Reset procedure is an exception from this principle.

The following specification principles have been applied for the procedure text in subclause 8:

— The procedure text discriminates between:

1) Functionality which "shall" be executed

The procedure text indicates that the receiving node "shall" perform a certain function Y under a certain condition. If the receiving node supports procedure X but cannot perform functionality Y requested in the REQUEST message of a Class 1 EP, the receiving node shall respond with the message used to report unsuccessful outcome for this procedure, containing an appropriate cause value.

2) Functionality which "shall, if supported" be executed

The procedure text indicates that the receiving node "shall, if supported," perform a certain function Y under a certain condition. If the receiving node supports procedure X, but does not support functionality Y, the receiving node shall proceed with the execution of the EP, possibly informing the requesting node about the not supported functionality.

- Any required inclusion of an optional IE in a response message is explicitly indicated in the procedure text. If the procedure text does not explicitly indicate that an optional IE shall be included in a response message, the optional IE shall not be included.

4.2 Forwards and Backwards Compatibility

The forwards and backwards compatibility of the protocol is assured by a mechanism where all current and future messages, and IEs or groups of related IEs, include Id and criticality fields that are coded in a standard format that will not be changed in the future. These parts can always be decoded regardless of the standard version.

4.3 Specification Notations

For the purposes of the present document, the following notations apply:

[FDD]	This tagging of a word indicates that the word preceding the tag "[FDD]" applies only to FDD. This tagging of a heading indicates that the heading preceding the tag "[FDD]" and the section following the heading applies only to FDD.
[TDD]	This tagging of a word indicates that the word preceding the tag "[TDD]" applies only to TDD. This tagging of a heading indicates that the heading preceding the tag "[TDD]" and the section following the heading applies only to TDD.
[FDD - ...]	This tagging indicates that the enclosed text following the "[FDD - " applies only to FDD. Multiple sequential paragraphs applying only to FDD are enclosed separately to enable insertion of TDD specific (or common) paragraphs between the FDD specific paragraphs.
[TDD - ...]	This tagging indicates that the enclosed text following the "[TDD - " applies only to TDD. Multiple sequential paragraphs applying only to TDD are enclosed separately to enable insertion of FDD specific (or common) paragraphs between the TDD specific paragraphs.
Procedure	When referring to an elementary procedure in the specification the Procedure Name is written with the first letters in each word in upper case characters followed by the word-_"procedure", e.g. Radio Link Setup procedure.
Message	When referring to a message in the specification the MESSAGE NAME is written with all letters in upper case characters followed by the word-_"message", e.g. RADIO LINK SETUP REQUEST message.
IE	When referring to an information element (IE) in the specification the <i>Information Element Name</i> is written with the first letters in each word in upper case characters and all letters in <i>Italic font</i> followed by the abbreviation-_"IE", e.g. <i>Transport Format Set IE</i> .

Value of an IE When referring to the value of an information element (IE) in the specification the "Value" is written as it is specified in subclause 9.2 enclosed by quotation marks, e.g. "Abstract Syntax Error (Reject)" or "SSDT Active in the UE".

5 NBAP Services

5.1 Parallel Transactions

Unless explicitly indicated in the procedure description, at any instance in time one protocol peer shall have a maximum of one ongoing dedicated NBAP procedure related to a certain Node B C_eommunication C_eontext.

6 Services Expected from Signalling Transport

NBAP requires an assured in-sequence delivery service from the signalling bearer, and notification if the assured in-sequence delivery service is no longer available.

7 Functions of NBAP

The NBAP protocol provides the following functions:

- Cell Configuration Management. This function gives the CRNC the possibility to manage the cell configuration information in a Node B.
- Common Transport Channel Management. This function gives the CRNC the possibility to manage the configuration of Common Transport Channels in a Node B.
- System Information Management. This function gives the CRNC the ability to manage the scheduling of System Information to be broadcast in a cell.
- Resource Event Management. This function gives the Node B the ability to inform the CRNC about the status of Node B resources.
- Configuration Alignment. This function gives the CRNC and the Node B the possibility to verify and enforce that both nodes have the same information on the configuration of the radio resources.
- Measurements on Common Resources. This function allows the Node B-CRNC to initiate measurements on common resources in the Node B. The function also allows the Node B to report the result of the measurements.
- Radio Link Management. This function allows the CRNC to manage radio links using dedicated resources in a Node B.
- Radio Link Supervision. This function allows the CRNC to report failures and restorations of a Radio Link.
- Compressed Mode Control [FDD]. This function allows the CRNC to control the usage of compressed mode in a Node B.
- Measurements on Dedicated Resources. This function allows the CRNC to initiate measurements on dedicated resources in the Node B. The function also allows the Node B to report the result of the measurements.
- DL Power Drifting Correction [FDD]. This function allows the CRNC to adjust the DL power level of one or more Radio Links in order to avoid DL power drifting between the Radio Links.
- Reporting of General Error Situations. This function allows reporting of general error situations, for which function specific error messages have not been defined.
- Physical Shared Channel Management [TDD]. This function allows the CRNC to manage physical resources in the Node B belonging to Shared Channels (USCH/DSCH).

- DL Power Timeslot Correction [TDD]. This function enables the Node B to apply an individual offset to the transmission power in each timeslot according to the downlink interference level at the UE.

The mapping between the above functions and NBAP elementary procedures is shown in the table below.

Table 1: Mapping between functions and NBAP elementary procedures

Function	Elementary Procedure(s)
Cell Configuration Management	a) Cell Setup b) Cell Reconfiguration c) Cell Deletion
Common Transport Channel Management	a) Common Transport Channel Setup b) Common Transport Channel Reconfiguration c) Common Transport Channel Deletion
System Information Management	System Information Update
Resource Event Management	a) Block Resource b) Unblock Resource c) Resource Status Indication
Configuration Alignment	a) Audit Required b) Audit c) Reset
Measurements on Common Resources	a) Common Measurement Initiation b) Common Measurement Reporting c) Common Measurement Termination d) Common Measurement Failure
Radio Link Management.	a) Radio Link Setup b) Radio Link Addition c) Radio Link Deletion d) Unsynchronised Radio Link Reconfiguration e) Synchronised Radio Link Reconfiguration Preparation f) Synchronised Radio Link Reconfiguration Commit g) Synchronised Radio Link Reconfiguration Cancellation h) Radio Link Pre-emption
Radio Link Supervision.	a) Radio Link Failure b) Radio Link Restoration
Compressed Mode Control [FDD]	a) Radio Link Setup b) Radio Link Addition c) Compressed Mode Command d) Unsynchronised Radio Link Reconfiguration e) Synchronised Radio Link Reconfiguration Preparation f) Synchronised Radio Link Reconfiguration Commit g) Synchronised Radio Link Reconfiguration Cancellation
Measurements on Dedicated Resources	a) Dedicated Measurement Initiation b) Dedicated Measurement Reporting c) Dedicated Measurement Termination d) Dedicated Measurement Failure
DL Power Drifting Correction [FDD]	Downlink Power Control
Reporting of General Error Situations	Error Indication
Physical Shared Channel Management [TDD]	Physical Shared Channel Reconfiguration
DL Power Timeslot Correction [TDD]	Downlink Power Timeslot Control

8 NBAP Procedures

8.1 Elementary Procedures

NBAP procedures are divided into common procedures and dedicated procedures.

- NBAP common procedures are procedures that request initiation of a **UE-Node B Communication eC**ontext for a specific UE in Node B or are not related to a specific UE. NBAP common procedures also incorporate logical O&M [1] procedures.
- NBAP dedicated procedures are procedures that are related to a specific **UE-Node B Communication eC**ontext in Node B. This **UE-Node B Communication eC**ontext is identified by a **UE-Node B Communication eC**ontext identity.

The two types of procedures may be carried on separate signalling links.

In the following tables, all EPs are divided into Class 1 and Class 2 EPs:

Table 2: Class 1

Elementary Procedure	Message	Successful Outcome	Unsuccessful Outcome
		Response message	Response message
Cell Setup	CELL SETUP REQUEST	CELL SETUP RESPONSE	CELL SETUP FAILURE
Cell Reconfiguration	CELL RECONFIGURATION REQUEST	CELL RECONFIGURATION RESPONSE	CELL RECONFIGURATION FAILURE
Cell Deletion	CELL DELETION REQUEST	CELL DELETION RESPONSE	
Common Transport Channel Setup	COMMON TRANSPORT CHANNEL SETUP REQUEST	COMMON TRANSPORT CHANNEL SETUP RESPONSE	COMMON TRANSPORT CHANNEL SETUP FAILURE
Common Transport Channel Reconfiguration	COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST	COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE	COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE
Common Transport Channel Deletion	COMMON TRANSPORT CHANNEL DELETION REQUEST	COMMON TRANSPORT CHANNEL DELETION RESPONSE	
Physical Shared Channel Reconfigure [TDD]	PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST	PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE	PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE
Audit	AUDIT REQUEST	AUDIT RESPONSE	AUDIT FAILURE
Block Resource	BLOCK RESOURCE REQUEST	BLOCK RESOURCE RESPONSE	BLOCK RESOURCE FAILURE
Radio Link Setup	RADIO LINK SETUP REQUEST	RADIO LINK SETUP RESPONSE	RADIO LINK SETUP FAILURE
System Information Update	SYSTEM INFORMATION UPDATE REQUEST	SYSTEM INFORMATION UPDATE RESPONSE	SYSTEM INFORMATION UPDATE FAILURE
Common Measurement Initiation	COMMON MEASUREMENT INITIATION REQUEST	COMMON MEASUREMENT INITIATION RESPONSE	COMMON MEASUREMENT INITIATION FAILURE
Radio Link Addition	RADIO LINK ADDITION REQUEST	RADIO LINK ADDITION RESPONSE	RADIO LINK ADDITION FAILURE
Radio Link Deletion	RADIO LINK DELETION REQUEST	RADIO LINK DELETION RESPONSE	
Synchronised Radio Link Reconfiguration Preparation	RADIO LINK RECONFIGURATION PREPARE	RADIO LINK RECONFIGURATION READY	RADIO LINK RECONFIGURATION FAILURE
Unsynchronised Radio Link Reconfiguration	RADIO LINK RECONFIGURATION REQUEST	RADIO LINK RECONFIGURATION RESPONSE	RADIO LINK RECONFIGURATION FAILURE
Dedicated Measurement Initiation	DEDICATED MEASUREMENT INITIATION REQUEST	DEDICATED MEASUREMENT INITIATION RESPONSE	DEDICATED MEASUREMENT INITIATION FAILURE
Reset	RESET REQUEST	RESET RESPONSE	

Table 3: Class 2

Elementary Procedure	Message
Resource Status Indication	RESOURCE STATUS INDICATION
Audit Required	AUDIT REQUIRED INDICATION
Common Measurement Reporting	COMMON MEASUREMENT REPORT
Common Measurement Termination	COMMON MEASUREMENT TERMINATION REQUEST
Common Measurement Failure	COMMON MEASUREMENT FAILURE INDICATION
Synchronised Radio Link Reconfiguration Commit	RADIO LINK RECONFIGURATION COMMIT
Synchronised Radio Link Reconfiguration Cancellation	RADIO LINK RECONFIGURATION CANCELLATION
Radio Link Failure	RADIO LINK FAILURE INDICATION
Radio Link Restoration	RADIO LINK RESTORE INDICATION
Dedicated Measurement Reporting	DEDICATED MEASUREMENT REPORT
Dedicated Measurement Termination	DEDICATED MEASUREMENT TERMINATION REQUEST
Dedicated Measurement Failure	DEDICATED MEASUREMENT FAILURE INDICATION
Downlink Power Control [FDD]	DL POWER CONTROL REQUEST
Compressed Mode Command [FDD]	COMPRESSED MODE COMMAND
Unblock Resource	UNBLOCK RESOURCE INDICATION
Error Indication	ERROR INDICATION
Downlink Power Timeslot Control [TDD]	DL POWER TIMESLOT CONTROL REQUEST
Radio Link Pre-emption	RADIO LINK PREEMPTION REQUIRED INDICATION

8.2 NBAP Common Procedures

8.2.1 Common Transport Channel Setup

8.2.1.1 General

This procedure is used for establishing the necessary resources in Node B, regarding Secondary CCPCH, PICH, PRACH, PCPCH [FDD], AICH [FDD], AP_AICH [FDD], CD/CA-ICH [FDD], FACH, PCH, RACH and CPCH [FDD].

8.2.1.2 Successful Operation

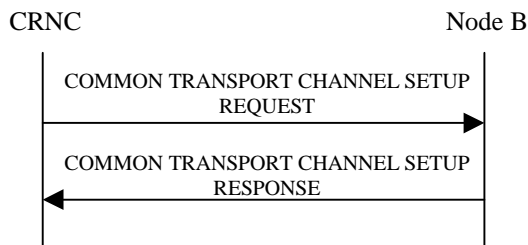


Figure 1: Common Transport Channel Setup procedure, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL SETUP REQUEST message sent from the CRNC to the Node B **using the Node B Control Port**.

One message can configure only one of the following combinations:

- [FDD - one Secondary CCPCH, and FACHs, PCH and PICH related to that Secondary CCPCH], or
- [TDD - one CCTrCH consisting of Secondary CCPCHs and FACHes, PCH with the corresponding PICH related to that group of Secondary CCPCHs], or
- one PRACH, one RACH and one AICH (FDD) related to that PRACH.
- [FDD-PCPCHs, one CPCH, one AP_AICH and one CD/CA-ICH related to that group of PCPCHs.]

Secondary CCPCH:

—[FDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains *the Secondary CCPCH IE* ~~Secondary CCPCH~~, the Node B shall configure and activate *the indicated Secondary CCPCH* ~~it~~ according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.]

[TDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains *the Secondary CCPCH IE* ~~one or more Secondary CCPCHs~~, the Node B shall configure and activate *the indicated Secondary CCPCH(s)* ~~them~~ according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.]

[TDD - FACHs and PCH may be mapped onto a CCTrCH which may consist of several Secondary CCPCHs]

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains *the FACH Parameters IE* ~~one or several FACHs~~, the Node B shall configure and activate *the indicated FACH(s)* ~~them~~ according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains *the PCH Parameters IE* ~~a PCH and a PICH~~, the Node B shall configure and activate *the concerned PCH and the associated PICH* ~~them~~ according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

PRACH:

—When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains *the PRACH IE* ~~PRACH~~, the Node B shall configure and activate *it* ~~the indicated PRACH and the associated RACH~~ [FDD – and the associated *AICH*] according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[FDD-PCPCHs]:

—When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains *the CPCH Parameters IE* ~~PCPCHs~~, the Node B shall configure and activate *the indicated CPCH and the associated PCPCH(s), AP-AICH and CD/CA-ICH* ~~it~~ according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

—If ~~the~~ COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *CD Signatures IE*, the Node B may use only the given CD signatures on CD/CA-ICH.

—If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *Channel Request Parameters IE* ~~Channel Request Parameters~~, the Node B shall use the parameters to distinguish the PCPCHs.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *AP Sub Channel Number IE* in *Channel Request Parameters IE* ~~Channel Request Parameters~~, the Node B shall use AP sub channel number to distinguish the PCPCHs.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *AP Sub Channel Number IE* in *SF Request Parameters IE* ~~SF Request Parameters~~, the Node B shall use AP sub channel number to distinguish the requested Spreading Factors.

General:

After ~~successfully configuring the requested common transport channels and the common physical channels~~, the Node B shall store the value of *Configuration Generation ID IE* and it shall respond with the COMMON TRANSPORT CHANNEL SETUP RESPONSE message with the *Common Transport Channel ID IE*, the *Binding ID IE* and the *Transport Layer Address IE* for the configured common transport channels.

After a successful procedure and once the transport bearers are established, the configured common transport channels and the common physical channels shall adopt the state Enabled [6] in *the* Node B and the common physical channels exist on the Uu interface.

8.2.1.3 Unsuccessful Operation

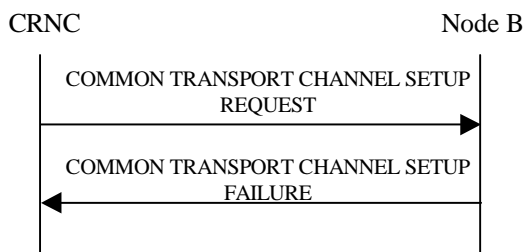


Figure 2: Common Transport Channel Setup procedure, Unsuccessful Operation

If the Node B is not able to support all or part of the configuration, it shall reject the configuration of all the channels in the COMMON TRANSPORT CHANNEL SETUP REQUEST message. The channels in the COMMON TRANSPORT CHANNEL SETUP REQUEST message shall remain in the same state as prior to the procedure. The *Cause* IE shall be set to an appropriate value. The value of *Configuration Generation ID* IE from the COMMON TRANSPORT CHANNEL SETUP REQUEST message shall not be stored.

If the configuration was unsuccessful, the Node B shall respond with a COMMON TRANSPORT CHANNEL SETUP FAILURE message.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell not available
- Power level not supported
- Node B Resources unavailable
- Requested Tx Diversity Mode not supported
- UL SF not supported
- DL SF not supported
- Common Transport Channel Type not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.1.4 Abnormal Conditions

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Secondary CCPCH* IE, and that IE contains [FDD – neither the *FACH Parameters* IE nor the *PCH Parameters* IE][TDD – neither the *FACH* IE nor the *PCH* IE], the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.

[FDD – If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *CD Sub Channel Numbers* IE, but the *CD Signatures* IE is not present, then the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.]

[TDD – If the *FACH CTrCH Id* IE or the *PCH CTrCH Id* IE does not equal the *SCCPCH CTrCH-id* IE, the Node B shall regard the Common Transport Channel Setup procedure as having failed and the Node B shall send the COMMON TRANSPORT CHANNEL SETUP FAILURE message to the CRNC.]

[TDD – If the *TDD Physical Channel Offset* IE, the *Repetition Period* IE, and the *Repetition Length* IE are not equal for each SCCPCH configured within the CTrCH, the Node B shall regard the Common Transport Channel Setup procedure as having failed and the Node B shall send the COMMON TRANSPORT CHANNEL SETUP FAILURE message to the CRNC.]

If the state is already Enabled or Disabled [6] for at least one channel in the COMMON TRANSPORT CHANNEL SETUP REQUEST message which is received, the Node B shall reject the configuration of all channels with the *Cause* IE set to "Message not compatible with receiver state".

8.2.2 Common Transport Channel Reconfiguration

8.2.2.1 General

This procedure is used for reconfiguring common transport channels and/or common physical channels, while they still might be in operation.

8.2.2.2 Successful Operation

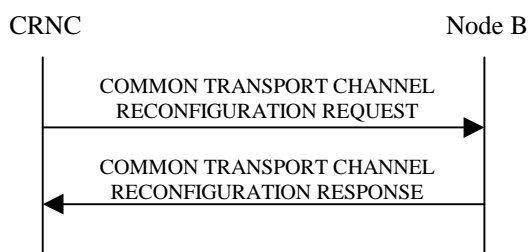


Figure 3: Common Transport Channel Reconfiguration, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

One message can configure only one of the following combinations:

- [FDD – FACHs, one PCH and/or one PICH related to one Secondary CCPCH], or
- [TDD – one CTrCH consisting of Secondary CCPCHs and FACHs, PCH with the corresponding PICH related to that group of Secondary CCPCHs], or
- one RACH and/or one AICH[FDD] related to one PRACH, or
- [FDD – one CPCH and/or one AP-AICH and/or one CD/CA-ICH related to one CPCH].

~~FDD~~ SCCPCH:

— [TDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *SCCPCH Power* IE, the Node B shall reconfigure the power that the indicated S-CCPCH shall use.]

FACH:

— If the *FACH Parameters* IE is present, the Node B shall reconfigure the indicated FACH(s).

[FDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Max FACH Power* IE, the Node B shall reconfigure the maximum power that the indicated FACH may use.]

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWS* IE, the Node B shall reconfigure the time of arrival window startpoint that the indicated FACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWE* IE, the Node B shall reconfigure the time of arrival window endpoint that the indicated FACH shall use.

PCH:

— If the PCH Parameters IE When the PCH is present, the Node B shall reconfigure the indicated PCH.

[FDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *PCH Power* IE, the Node B shall reconfigure the power that the PCH shall use.]

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWS* IE, the Node B shall reconfigure the time of arrival window startpoint that the PCH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWE* IE, the Node B shall reconfigure the time of arrival window endpoint that the PCH shall use.

PICH:

If the PICH Parameters IE When a PICH is present, the Node B shall reconfigure the indicated PICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *PICH Power* IE, the Node B shall reconfigure the power that the PICH shall use.

[FDD – PRACH]:

— If the PRACH Parameters IE When a PRACH is present, the Node B shall reconfigure the indicated PRACH(s).

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the Preamble Signatures IE Allowed Preamble Signatures Information, the Node B shall reconfigure the preamble signatures that the indicated PRACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the Allowed Slot Format Information IE Allowed Slot Format Information, the Node B shall reconfigure the slot formats that the indicated PRACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the RACH Sub Channel Numbers IE Allowed Sub Channel Information, the Node B shall reconfigure the sub channel numbers that the indicated PRACH shall use.

[FDD – AICH]:

— If the AICH Parameters IE When a AICH is present, the Node B shall reconfigure the indicated AICH(s).

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *AICH Power* IE, the Node B shall reconfigure the power that the indicated AICH shall use.

[FDD – CPCH]:

— If the CPCH Parameters IE When a CPCH is present, the Node B shall reconfigure the indicated CPCH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the UL SIR IE UL SIR Information, the Node B shall reconfigure the UL SIR for the UL power control for the indicated CPCH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the Initial DL Transmission Power IE Initial DL transmission Power Information, the Node B shall reconfigure the Initial DL ϵ Transmission Power for the indicated CPCH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the Maximum DL Power IE Maximum DL Power Information, the Node B shall apply this value to the new configuration of the indicated CPCH and never transmit with a higher power on any DL PCPCHs once the new configuration is being used.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the Minimum DL Power IE Minimum DL Power Information, the Node B shall apply this value to the new configuration of the indicated CPCH and never transmit with a lower power on any DL PCPCHs once the new configuration is being used.

[FDD – AP-AICH]:

— If the *AP-AICH Parameters IE* When a *AP-AICH* is present, the Node B shall reconfigure the indicated AP-AICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *AP-AICH Power IE*, the Node B shall reconfigure the power that the AP-AICH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *CSICH Power IE*, the Node B shall reconfigure the power that the CSICH shall use.

[FDD-CD/CA-ICH]:

If the *CD/CA-ICH Parameters IE* When a *CD/CA-ICH* is present, the Node B shall reconfigure the indicated CD/CA-ICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *CD/CA-AICH Power IE*, the Node B shall reconfigure the power that the CD/CA-AICH shall use.

General:

After a successful procedure, the channels will have adopted the new configuration in the Node B. The channels in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message shall remain in the same state as prior to the procedure. The Node B shall store the value of *Configuration Generation ID IE*, and the Node B shall respond with the COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE message.

8.2.2.3 Unsuccessful Operation

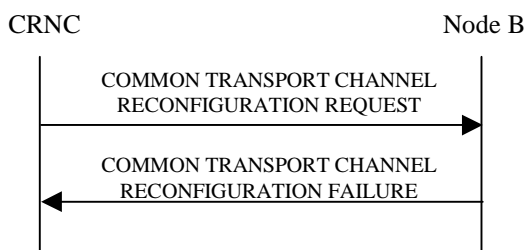


Figure 4: Common Transport Channel Reconfiguration procedure, Unsuccessful Operation

If the Node B is not able to support all or parts of the configuration, it shall reject the configuration of all the channels in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message. The channels in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message shall remain in the same state as prior to the procedure. The *Cause IE* shall be set to an appropriate value. The value of *Configuration Generation ID IE* from the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message shall not be stored.

If the configuration was unsuccessful, the Node B shall respond with the COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE message.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell not available
- Power level not supported
- Node B Resources unavailable

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload

- HW failure

8.2.2.4 Abnormal Conditions

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8.2.3 Common Transport Channel Deletion

8.2.3.1 General

This procedure is used for deleting common physical channels and common transport channels.

8.2.3.2 Successful Operation

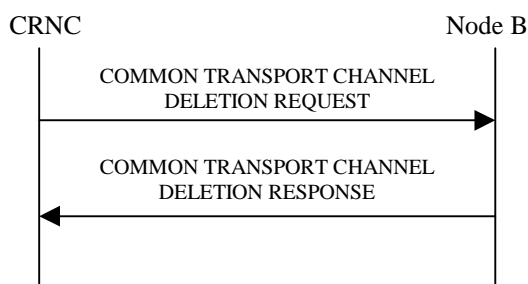


Figure 5: Common Transport Channel Deletion procedure, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL DELETION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Secondary CCPCH:

— When-If the Common Physical Channel ID IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates contains a Secondary CCPCH, the Node B shall delete the indicated channel and the FACHs and PCH supported by that Secondary CCPCH. If there is a PCH that is deleted, the PICH associated with that PCH shall also be deleted.

PRACH:

— When-If the Common Physical Channel ID IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates contains a PRACH, the Node B shall delete the indicated channel and the RACH supported by the PRACH. [FDD - The AICH associated with the RACH shall also be deleted.]

[FDD – PCPCHes]:

— When-If the Common Physical Channel ID IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates contains one of the PCPCHes for a CPCH, the Node B shall delete all PCPCHs associated with the indicated channel and the CPCH supported by these PCPCHes. The AP-AICH and CD/CA-ICH associated with the CPCH shall also be deleted.

General:

[TDD – If the requested common physical channel is a part of a CCTrCH, all common transport channels and all common physical channels associated with this CCTrCH shall be deleted.]

After a successful procedure, the channels are deleted in the Node B. The channels in the COMMON TRANSPORT CHANNEL DELETION REQUEST message shall be set to state Not Existing ref. [6]. The Node B shall store the received value of the *Configuration Generation ID IE*, and respond with the COMMON TRANSPORT CHANNEL DELETION RESPONSE message.

8.2.3.3 Unsuccessful Operation

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8.2.3.4 Abnormal Conditions

If the C-ID in the COMMON TRANSPORT CHANNEL DELETION REQUEST message is not existing in the Node B or the Common Physical Channel ID does not exist in the Cell, the Node B shall respond with the COMMON TRANSPORT CHANNEL DELETION RESPONSE message.

8.2.4 Block Resource

8.2.4.1 General

The Node B initiates this procedure to request the CRNC to prohibit the usage of the specified logical resources.

The logical resource that can be blocked is a cell.

8.2.4.2 Successful Operation

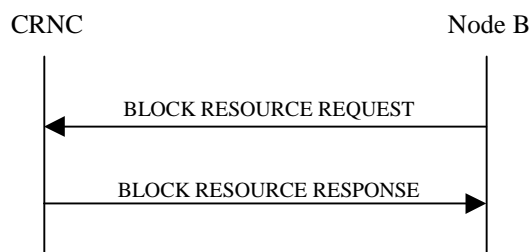


Figure 6: Block Resource procedure, Successful Operation

The procedure is initiated with a BLOCK RESOURCE REQUEST message sent from the Node B to the CRNC using the Node B Control Port.

Upon reception of the BLOCK RESOURCE REQUEST message, the CRNC shall prohibit the use of the indicated logical resources according to the *Blocking Priority Indicator IE*.

If the *Blocking Priority Indicator IE* in the BLOCK RESOURCE REQUEST message indicates "*High Priority*", the CRNC shall prohibit the use of the logical resources immediately.

The BLOCK RESOURCE REQUEST message shall include the *Shutdown Timer IE* when If the *Blocking Priority Indicator IE* in the BLOCK RESOURCE REQUEST message indicates "*Normal Priority*". The CRNC shall prohibit the use of the logical resources if the resources are idle or immediately upon expiry of the shutdown timer specified by the *Shutdown Timer IE* in the BLOCK RESOURCE REQUEST message. New traffic shall not be allowed to use the logical resources while the CRNC waits for the resources to become idle and once the resources are blocked.

If the *Blocking Priority Indicator IE* in the BLOCK RESOURCE REQUEST message indicates "*Low Priority*", the CRNC shall prohibit the use of the logical resources when the resources become idle. New traffic shall not be allowed to use the logical resources while the CRNC waits for the resources to become idle and once the resources are blocked.

If the resources are successfully blocked, the CRNC shall respond with a BLOCK RESOURCE RESPONSE message. Upon reception of the BLOCK RESOURCE RESPONSE message, the Node B may disable [TDD - SCH], [FDD - the Primary SCH, the Secondary SCH, the Primary CPICH, if present the Secondary CPICH(s)] and the Primary CCPCH. The other logical resources in the cell shall be considered as blocked.

Reconfiguration of logical resources and change of System Information can be done, even when the logical resources are blocked.

Interactions with the Unblock Resource procedure:

If the UNBLOCK RESOURCE INDICATION message is received by the CRNC while a Block Resource procedure on the same logical resources is in progress, the CRNC shall cancel the Block Resource procedure and proceed with the Unblock Resource procedure.

If the BLOCK RESOURCE RESPONSE message or the BLOCK RESOURCE FAILURE message is received by the Node B after the Node B has initiated an Unblock Resource procedure on the same logical resources as the ongoing Block Resource procedure, the Node B shall ignore the response to the Block Resource procedure.

8.2.4.3 Unsuccessful Operation

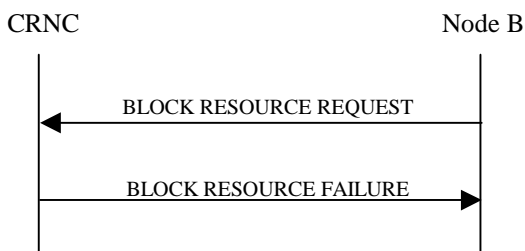


Figure 7: Block Resource procedure, Unsuccessful Operation

The CRNC may reject the request to block the logical resources, in which case the logical resources will remain unaffected and the CRNC shall respond to the Node B with the BLOCK RESOURCE FAILURE message. Upon reception of the BLOCK RESOURCE FAILURE message, the Node B shall leave the logical resources in the state that they were in prior to the start of the Block Resource procedure.

Typical cause values are as follows:

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

Radio Network Layer Cause

- Priority transport channel established

8.2.4.4 Abnormal Conditions

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8.2.5 Unblock Resource

8.2.5.1 General

The Node B initiates this procedure to indicate to the CRNC that logical resources are now unblocked.

The logical resource that can be unblocked is a cell.

8.2.5.2 Successful Operation

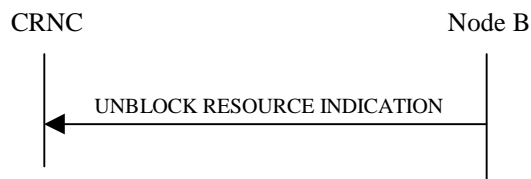


Figure 8: Unblock Resource procedure, Successful Operation

The procedure is initiated with an UNBLOCK RESOURCE INDICATION message sent from the Node B to the CRNC using the Node B Control Port. The Node B shall enable [TDD - SCH], [FDD - the Primary SCH, the Secondary SCH, the Primary CPICH, the Secondary CPICH(s) (if present)] and the Primary CCPCH that had been disabled due to the preceding Block Resource procedure before sending the UNBLOCK RESOURCE INDICATION message. Upon reception of the UNBLOCK RESOURCE INDICATION message, the CRNC may permit the use of the logical resources.

When the logical resource indicated is a cell, all associated physical channels and transport channels associated to the cell that is unblocked are also unblocked.

8.2.5.3 Abnormal Conditions

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8.2.6 Audit Required

8.2.6.1 General

The Node B initiates this procedure to request the CRNC to perform an audit of the logical resources at the Node B. This procedure is used to indicate a possible misalignment of state or configuration information.

8.2.6.2 Successful Operation

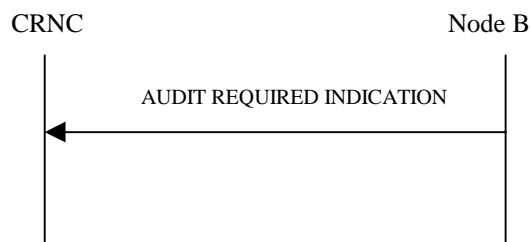


Figure 9: Audit Required procedure, Successful Operation

The procedure is initiated with an AUDIT REQUIRED INDICATION message sent from the Node B to the CRNC using the Node B Control Port.

If the Node B cannot ensure alignment of the state or configuration information, it should initiate the Audit Required procedure.

Upon receipt of the AUDIT REQUIRED INDICATION message, the CRNC should initiate the Audit procedure.

8.2.6.3 Abnormal Conditions

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8.2.7 Audit

8.2.7.1 General

This procedure is executed by the CRNC to perform an audit of the configuration and status of the logical resources in the Node B. A complete audit of a Node B is performed by one or more Audit procedures, together performing an audit sequence. The audit may cause the CRNC to re-synchronise the Node B to the status of logical resources known by the CRNC, that the Node B can support.

8.2.7.2 Successful Operation

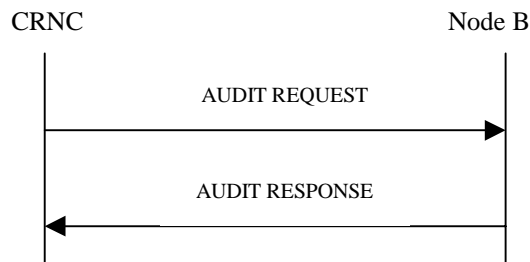


Figure 10: Audit procedure, Successful Operation

The procedure is initiated with an AUDIT REQUEST message sent from the CRNC to the Node B **using the Node B Control Port**.

If the *Start of Audit Sequence* IE in the AUDIT REQUEST message is set to "start of audit sequence" a new audit sequence is started, any ongoing audit sequence shall be aborted and the Node B shall provide (part of the) audit information. If the *Start of Audit Sequence* IE is set to "not start of audit sequence", the Node B shall provide (part of) the remaining audit information not already provided during this audit sequence.

If the information provided in the AUDIT RESPONSE message completes the audit sequence, the Node B shall set the *End Of AuditSequence Indicator* IE in the AUDIT RESPONSE message to "End of Audit Sequence". If not all audit information has been provided yet as part of the ongoing audit sequence, the Node B shall set the *End Of AuditSequence Indicator* IE in the AUDIT RESPONSE message to "Not End of Audit Sequence".

Information Provided In One Audit Sequence.

The Node B shall include one *Local Cell Information* IE for each local cell present in the Node B. The Node B shall include the *Maximum DL Power Capability* IE and the *Minimum DL Power Capability* IE when any of those values are known by the Node B.

If the Node B internal resources are pooled for a group of cells, the Node B shall include one *Local Cell Group Information* IE containing the Node B internal resource capacity and the consumption laws per group of cells. If the *UL Capacity Credit* IE is not present, then the internal resource capabilities of the Node B are modelled as shared resources between Uplink and Downlink.

The Node B shall include, for each local cell present in the Node B, the Node B internal resource capability and consumption laws within the *Local Cell Information* IE. If the *UL Capacity Credit* IE is not present, then the internal resource capabilities of the local cell are modelled as shared resources between Uplink and Downlink. If the Local Cell utilises Node B internal resource capabilities that are pooled for several Local Cell(s), the *Local Cell Group ID* IE shall contain the identity of the used Local Cell Group.

The Node B shall include one *Cell Information* IE for each cell in the Node B and information about all common transport channels and all common physical channels for each cell. If a *Configuration Generation ID* IE for a cell can not be trusted, the Node B shall set this *Configuration Generation ID* IE = "0".

The Node B shall also include one *Communication Control Port Information* IE for each **Communication Control Port** in the Node B.

8.2.7.3 Unsuccessful Operation

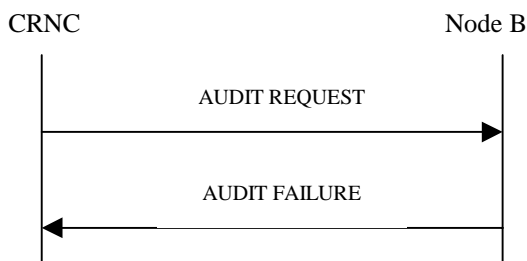


Figure 10A: Audit procedure, Unsuccessful Operation

If the Node B can-not perform an audit of the configuration and status of the logical resources, it shall send an **AUDIT FAILURE message** with the *Cause IE* set to an appropriate value.

8.2.7.4 Abnormal Conditions

If the Node B receives the **AUDIT REQUEST** message with the *Start of Audit Sequence IE* set to "not start of audit sequence" and there is no ongoing audit sequence, the Node B shall send the **AUDIT FAILURE** message with the appropriate cause value.

8.2.8 Common Measurement Initiation

8.2.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on common resources in a Node B.

8.2.8.2 Successful Operation

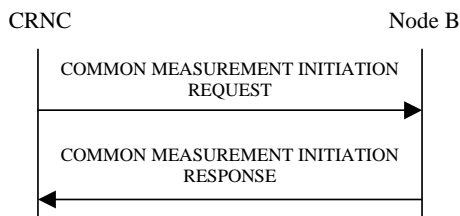


Figure 11: Common Measurement Initiation procedure, Successful Operation

The procedure is initiated with a **COMMON MEASUREMENT INITIATION REQUEST** message sent from the CRNC to the Node B using the Node B **Cecontrol Ppport**.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

[TDD - If the **Time Slot Information-Time Slot IE** is provided in the **COMMON MEASUREMENT INITIATION REQUEST messageCommon Measurement Object Type IE**, the measurement request shall apply to the requested time slot individually.]

[FDD - If the **Spreading Factor Information-Spreading Factor IE** is provided-present in the **COMMON MEASUREMENT INITIATION REQUEST messageCommon Measurement Object Type IE**, the measurement request shall apply to the PCPCHs whose minimum allowed spreading factor (Min UL Channelisation Code Length) is equal to the value of **the Spreading Factor IESpreading Factor Information**.

If the *SFN Reporting Indicator IE* is set to "FN Reporting Required", the *SFN IE* shall be included in the **COMMON MEASUREMENT REPORT message measurement report** or in the **COMMON MEASUREMENT RESPONSE**

~~message measurement response~~, the latter only in the case the *Report Characteristics* IE is set to *"On-Demand"*. The reported SFN shall be the SFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *SFN* IE is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

Report characteristics

The *Report Characteristics* IE indicates how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to *"On-Demand"*, the Node B shall ~~report~~ *return* the result of the requested measurement immediately.

If the *Report Characteristics* IE is set to *"Periodic"*, the Node B shall periodically initiate a *Common* Measurement Reporting procedure for this measurement, with the requested report frequency.

If the *Report Characteristics* IE is set to *"Event A"*, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If ~~the Measurement Hysteresis Time IE is not included~~ *no hysteresis time is given*, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to *"Event B"*, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If ~~the Measurement Hysteresis Time IE is not included~~ *no hysteresis time is given*, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to *"Event C"*, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising/~~falling~~ time *specified by the Measurement Change Time IE* has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to *"Event D"*, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls ~~more by an amount greater~~ than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the ~~rising~~/~~falling~~ time *specified by the Measurement Change Time IE* has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to *"Event E"*, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If ~~the Measurement Threshold 2 IE Measurement Threshold 2~~ is not present, the Node B shall use ~~the value of the Measurement Threshold 1 IE Measurement Threshold 1~~ instead. If ~~the Measurement Hysteresis Time IE is not included~~ *no Measurement Hysteresis Time is provided*, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to *"Event F"*, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the Node B shall also initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If ~~the Measurement Threshold 2 IE Measurement Threshold 2~~ is not present, the Node B shall use ~~the value of the Measurement Threshold 1 IE Measurement Threshold 1~~ instead. If ~~the Measurement Hysteresis Time IE is not included~~ *no Measurement Hysteresis Time is provided*, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is not set to *"On-Demand"*, the Node B is required to perform reporting for a common measurement object, in accordance with the conditions provided in the COMMON MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no common measurement object(s) for which a measurement is defined exists any-more, the Node B shall terminate the measurement locally, *i.e.* without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Common Measurement Reporting procedure immediately, and then continue with the measurements as specified in the COMMON MEASUREMENT INITIATION REQUEST message.

Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows:

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the COMMON MEASUREMENT INITIATION RESPONSE, COMMON MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n)

$a = 1/2^{(k/2)}$, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

Response message

If the Node B was able to initiate the measurement requested by the CRNC, it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message sent over the Node B Control Port. The message shall include the same Measurement ID that was used in the measurement request. Only in the case where the *Report Characteristics* IE is set to "On-Demand", the COMMON MEASUREMENT INITIATION RESPONSE message shall contain the measurement result.

8.2.8.3 Unsuccessful Operation

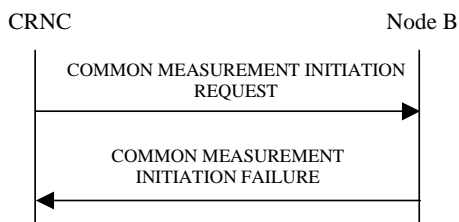


Figure 12: Common Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a COMMON MEASUREMENT INITIATION FAILURE message sent over the Node B Control Port. The message shall include the same Measurement ID that was used in the COMMON MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Measurement not supported for the object.
- Measurement Temporarily not Available

8.2.8.4 Abnormal Conditions

If the Common Measurement Type received in the *Common Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Common Measurement Object Type received ~~in the *Common Measurement Object Type* IE~~ in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

[TDD - If the ~~eCommon m~~Measurement requires the Time Slot Information but the *Time Slot* IE is not ~~present~~ provided ~~in the *Common Measurement Object Type* IE~~ in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.]

8.2.9 Common Measurement Reporting

8.2.9.1 General

This procedure is used by ~~the~~ Node B to report the result of measurements requested by the CRNC with the Common Measurement Initiation procedure.

8.2.9.2 Successful Operation

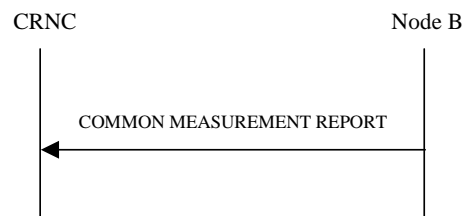


Figure 13: Common Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the Node B shall initiate the Common Measurement Reporting procedure. The COMMON MEASUREMENT REPORT message shall use the Node B ~~C~~ontrol ~~P~~port.

The ~~Common~~ Measurement ID IE shall be set to the ~~Common~~ Measurement ID provided by the CRNC when initiating the measurement with the Common Measurement Initiation procedure.

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see ref.[22] and [23]), the Measurement not available shall be reported.

8.2.9.3 Abnormal Conditions

-

8.2.10 Common Measurement Termination

8.2.10.1 General

This procedure is used by the CRNC to terminate a measurement previously requested by the Common Measurement Initiation procedure.

8.2.10.2 Successful Operation



Figure 14: Common Measurement Termination procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT TERMINATION REQUEST message, sent from the CRNC to the Node B using the Node B eControl pPort.

Upon reception, the Node B shall terminate reporting of common measurements corresponding to the received Measurement ID IE Common Measurement ID.

8.2.10.3 Abnormal Conditions

-

8.2.11 Common Measurement Failure

8.2.11.1 General

This procedure is used by the Node B to notify the CRNC that a measurement previously requested by the Common Measurement Initiation procedure can no longer be reported.

8.2.11.2 Successful Operation



Figure 15: Common Measurement Failure procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT FAILURE INDICATION message, sent from the Node B to the CRNC using the Node B Control Pport, to inform the CRNC that a previously requested measurement can no longer be reported. The Node B has locally terminated the indicated measurement.

8.2.11.3 Abnormal Conditions

-

8.2.12 Cell Setup

8.2.12.1 General

This procedure is used to set up a cell in the Node B. The CRNC takes the cell, identified via the *C-ID* IE, into service and uses the resources in the Node B identified via the *Local Cell ID* IE.

8.2.12.2 Successful Operation

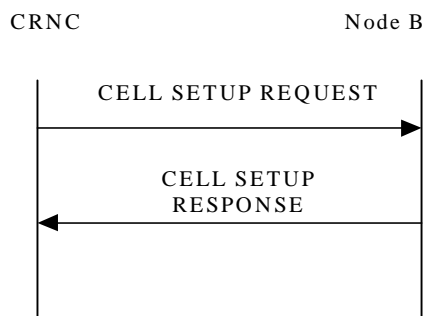


Figure 16: Cell Setup procedure, Successful Operation

The procedure is initiated with a CELL SETUP REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon Reception, the Node B shall reserve the necessary resources and configure the new cell according to the parameters given in the message.

[FDD - If the CELL SETUP REQUEST message includes one or more *Secondary CPICH Information IE*, the Node B shall configure and activate the Secondary CPICH(s) in the cell according to received configuration data.]

The *Maximum Transmission Power IE* value shall be stored in the Node B and, at any instance of time, the total maximum output power in the cell shall not be above this value.

[FDD - If the *Closed Loop Timing Adjustment Mode IE* is included in the CELL SETUP REQUEST message, the value shall be stored in the Node B and applied when closed loop Feed-Back mode diversity is used on DPCH.]

When the cell is successfully configured, the Node B shall store the *Configuration Generation ID IE* value and send a CELL SETUP RESPONSE message as a response.

[FDD - When the cell is successfully configured, the CPICH(s), Primary SCH, Secondary SCH, Primary CCPCH and BCH exist.][TDD - When the cell is successfully configured, the SCH, Primary CCPCH and BCH exist and the switching-points for the TDD frame structure are defined.] The cell and the channels shall be set to the state Enabled [6].

8.2.12.3 Unsuccessful Operation

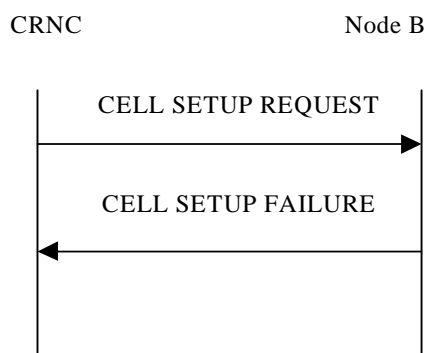


Figure 17: Cell Setup procedure: Unsuccessful Operation

If the Node B cannot set up the cell according to the information given in CELL SETUP REQUEST message, the CELL SETUP FAILURE message shall be sent to the CRNC.

In this case, the cell is Not Existing in the Node B. The Configuration Generation ID shall not be changed in the Node B.

The *Cause IE* shall be set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- S-CPICH not supported
- Requested Tx Diversity Mode not supported
- Power level not supported
- Node B Resources unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.12.4 Abnormal Conditions

If the state of the cell already is Enabled or Disabled [6] when the CELL SETUP REQUEST message is received in the Node B, it shall reject the configuration of the cell and all channels in the CELL SETUP REQUEST message by sending a CELL SETUP FAILURE message with the *Cause* IE set to "Message not compatible with receiver state".

8.2.13 Cell Reconfiguration

8.2.13.1 General

This procedure is used to reconfigure a cell in the Node B.

8.2.13.2 Successful Operation

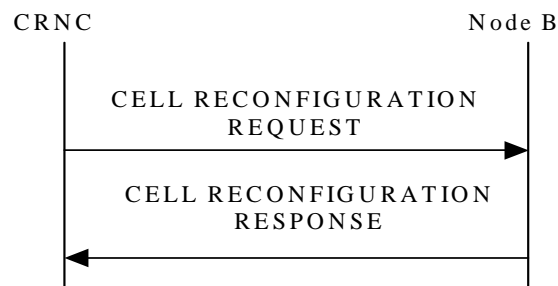


Figure 18: Cell Reconfiguration procedure, Successful Operation

The procedure is initiated with a CELL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon Reception, the Node B shall reconfigure the cell according to the parameters given in the message.

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary SCH Information IE*, the Node B shall reconfigure the Primary SCH power in the cell according to *Primary SCH Power IE* value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Secondary SCH Information IE*, the Node B shall reconfigure the Secondary SCH power in the cell according to the *Secondary SCH Power IE* value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CPICH Information IE*, the Node B shall reconfigure the Primary CPICH power in the cell according to the *Primary CPICH Power IE* value. The Node B shall adjust all the transmitted power levels relative to the Primary CPICH power according to the new value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes one or more *Secondary CPICH Information IE*, the Node B shall reconfigure the power for each Secondary CPICH in the cell according to their *Secondary CPICH Power IE* value.]

[TDD - If the CELL RECONFIGURATION REQUEST message includes the *SCH Information IE*, the Node B shall reconfigure the SCH power in the cell according to the *SCH Power IE* value.]

[TDD - If the CELL RECONFIGURATION REQUEST message includes the *Timing Advance Applied IE*, the Node B shall apply the necessary functions for Timing Advance in that cell including reporting of the Rx Timing Deviation measurement, according to the *Timing Advance Applied IE* value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CCPCH Information IE*, the Node B shall reconfigure the BCH power in the cell according to the *BCH Power IE* value.]

[TDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CCPCH Information IE*, the Node B shall reconfigure the P-CCPCH power in the cell according to the *P-CCPCH Power IE* value. The Node B shall adjust all the transmitted power levels relative to the Primary CPPCH power according to the new value.]

If the CELL RECONFIGURATION REQUEST message includes the *Maximum Transmission Power IE*, the value shall be stored in the Node B and at any instance of time the total maximum output power in the cell shall not be above this value.

[TDD - If the CELL RECONFIGURATION REQUEST message includes the *Timeslot Information IE*, the Node B shall reconfigure switching-point structure in the cell according to the *Timeslot IE* value.]

[TDD - If the CELL RECONFIGURATION REQUEST message includes any of the *Constant Value IEs*, the Node B shall use these values when generating the appropriate SIB.]

When the cell is successfully reconfigured, the Node B shall store the new *Configuration Generation ID IE* value and send a CELL RECONFIGURATION RESPONSE message as a response.

If the CELL RECONFIGURATION REQUEST message includes the *Synchronisation Configuration IE*, the Node B shall reconfigure the indicated parameters in the cell according to the value of the *N_INSYNC_IND, N_OUTSYNC_IND and T_RLFAILURE IEs* value. When the parameters in the *Synchronisation Configuration IE* affect the thresholds applied to a RL set, the Node B shall immediately apply the new thresholds. When applying the new thresholds, the Node B shall not change the state or value of any of the timers and counters for which the new thresholds apply.

8.2.13.3 Unsuccessful Operation

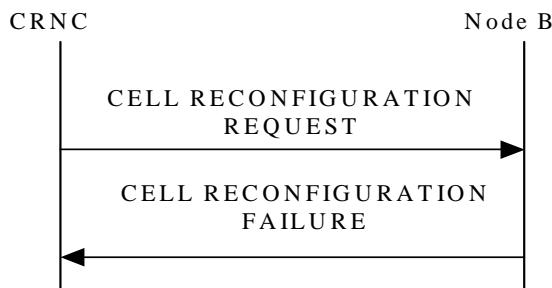


Figure 19: Cell Reconfiguration procedure: Unsuccessful Operation

If the Node B cannot reconfigure the cell according to the information given in CELL RECONFIGURATION REQUEST message, the CELL RECONFIGURATION FAILURE message shall be sent to the CRNC.

In this case, the Node B shall keep the old configuration of the cell and the Configuration Generation ID shall not be changed in the Node B.

The Cause-Cause IE shall be set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Power level not supported
- Node B Resources unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.13.4 Abnormal Conditions

-

8.2.14 Cell Deletion

8.2.14.1 General

This procedure is used to delete a cell in the Node B.

8.2.14.2 Successful Operation

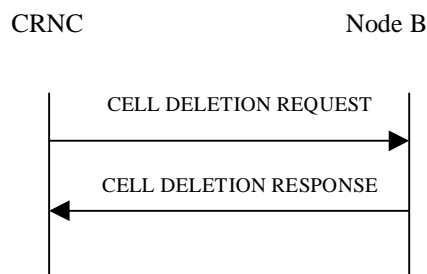


Figure 10: Cell Deletion procedure, Successful Operation

The procedure is initiated with a CELL DELETION REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon rReception, the Node B shall remove the cell and any remaining common and dedicated channels within the cell. The states for the cell and the deleted common channels shall be set to Not Existing [6]. The Node B shall remove all Radio Links from the Cell and all Node B Communication Contexts that as a result do not have a Radio Link. The Node B shall also initiate release of the user plane transport bearers for the removed common and dedicated channels.

When the cell is deleted, the Node B shall send a CELL DELETION RESPONSE message as a response.

8.2.14.3 Unsuccessful Operation

-

8.2.14.4 Abnormal Conditions

If the CELL DELETION REQUEST message includes a *C-ID* IE value that is not existing in the Node B, the Node B shall respond with the CELL DELETION RESPONSE message.

8.2.15 Resource Status Indication

8.2.15.1 General

This procedure is used in the following cases:

1. When a Local Cell becomes Existing at the Node B.
2. When a Local Cell is to be deleted in Node B, i.e. becomes Not Existing.
3. When the capabilities of the Local Cell change at the Node B.
4. When a cell has changed its capability and/or its resource operational state at the Node B.
5. When common physical channels and/or common transport channels have changed their capabilities at a the Node B.
6. When a Ceommunication Ceontrol Pport has changed its resource operational state at the Node B.
7. When a Local Cell Group has changed its resource capability at the Node B.

Each of the above cases shall trigger a Resource Status Indication procedure and the RESOURCE STATUS INDICATION message shall contain the logical resources affected for that case and the cause value when applicable.

8.2.15.2 Successful Operation



Figure 21: Resource Status Indication procedure, Successful Operation

The procedure is initiated with a RESOURCE STATUS INDICATION message sent from the Node B to the CRNC using the Node B Control Port.

Local Cell Becomes Existing:

When a Local Cell becomes Existing at the Node B, the Node B shall make it available to the CRNC by sending a RESOURCE STATUS INDICATION message containing with the Indication-Type IE set equal to a "No Failure" Indication, the Local Cell ID IE and the Add/Delete Indicator IE set equal to "Add".

When the capacity credits and consumption laws are shared between several Local Cells, the Node B includes the *Local Cell Group ID* IE for the Local Cell. If the *Local Cell Group Information* IE has not already been reported in a previous RESOURCE STATUS INDICATION message, the Node B shall include the capacity credits and the consumption laws in the *Local Cell Group Information* IE.

If the *Local Cell* IE contains both the *DL or Global Capacity Credit* IE and the *UL Capacity Credit* IE, then the internal resource capabilities of the Local Cell are modelled independently in the Uplink and Downlink direction. If the *UL Capacity Credit* IE is not present, then the internal resource capabilities of the Local Cell are modelled as shared resources between Uplink and Downlink. If the *Local Cell Group Information* IE contains both the *DL or Global Capacity Credit* IE and the *UL Capacity Credit* IE, then the internal resource capabilities of the Local Cell Group are modelled independently in the Uplink and Downlink direction. If the *UL Capacity Credit* IE is not present, then the internal resource capabilities of the Local Cell Group are modelled as shared resources between Uplink and Downlink.

Local Cell Deletion:

When a Local Cell is to be deleted in the Node B, i.e. becomes Not Existing, the Node B shall withdraw the Local Cell from the CRNC by sending a RESOURCE STATUS INDICATION message containing with the *Indication-Type* IE set equal to a "No Failure" Indication, the *Local Cell ID* IE and the *Add/Delete Indicator* IE set equal to "Delete". The Node B shall not withdraw a previously configured cell at the Node B that the CRNC had configured using the Cell Setup procedure, until the CRNC has deleted that cell at the Node B using the Cell Delete procedure.

Capability Change of a Local Cell:

When the capabilities of a Local Cell change at the Node B, the Node B shall report the new capability by sending a RESOURCE STATUS INDICATION message containing with the *Indication-Type* IE set equal to a "Service Impacting" Indication and the *Local Cell ID* IE.

The Node B shall include the *Minimum DL Power Capability* IE when it is known by the Node B.

If the maximum DL power capability of the Local Cell has changed, the new capability shall be indicated in the *Maximum DL Power Capability* IE.

If the DL capability for supporting the minimum spreading factor has changed, the new capability shall be indicated in the *Minimum Spreading Factor* IE.

The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

If the internal resource capabilities of the Local Cell are affected, it shall be reported in the following way:

- If the internal resource capabilities of the Local Cell are modelled as shared resources between Uplink and Downlink, the new capacity shall be reported in the *DL or Global Capacity Credit* IE.
- If the internal resource capabilities of the Local Cell are modelled independently in the Uplink and Downlink direction, then the *DL or Global Capacity Credit* IE and the *UL Capacity Credit* IE shall be present in the RESOURCE STATUS INDICATION. If the maximum DL power capability of the Local Cell is affected, this shall be reported using the *Maximum DL Power Capability* IE.

Capability Change of a Cell:

When the capabilities and/or resource operational state of a cell changes at the Node B, the Node B shall report the new capability and/or resource operational state by sending a RESOURCE STATUS INDICATION message containing with the *Indication-Type* IE set equal to a "Service Impacting" Indication, the *C-ID* IE, the *Resource Operational State* IE and the *Availability Status* IE. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

Capability Change of a Common Physical Channel and/or Common Transport Channel:

The Node B shall not delete any common or dedicated channels, due to the cell being "Disabled". For all affected common and dedicated channels, the Node B shall report the impact to the CRNC with the relevant procedures.

When the capabilities and/or resource operational state of common physical channels and/or common transport channels have changed, the Node B shall report the new capability and/or resource operational state by sending a RESOURCE STATUS INDICATION message containing with the *Indication-Type* IE set equal to a "Service Impacting" Indication, the *Resource Operational State* IE and the *Availability Status* IE set to appropriate values for the affected channel(s). The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

When a power value for a common physical channel and/or a common transport channel becomes beyond the supported power value range due to a change in capability in the Node Bs, it shall be reported to the CRNC in the RESOURCE STATUS INDICATION message, with the *Resource Operational State* IE set to "Enabled", the *Availability Status* IE set to "Degraded" and the *Cause* IE set to "Power level not supported". Affected channels shall use the nearest power value that is supported.

Capability Change of a Communication Control Port:

When the resource operational state of a Communication Control Port has changed, the Node B shall report the new resource operational state by sending a RESOURCE STATUS INDICATION message containing with the *Indication-Type* IE set equal to a "Service Impacting" Indication and the *Communication Control Port ID* IE. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

Capability Change of a Local Cell Group:

When the resource capabilities of a Local Cell Group change at the Node B, the Node B shall report the new capability by sending a RESOURCE STATUS INDICATION message containing with the *Indication-Type IE* set equal to a "Service Impacting" *Indication* and the *Local Cell Group Information IE* reporting the change. The *Cause IE* in the RESOURCE STATUS INDICATION message shall be set to an appropriate value. If the RESOURCE STATUS INDICATION message contains both the *DL or Global Capacity Credit IE* and the *UL Capacity Credit IE*, then the internal resource capabilities of the Node B are modelled independently in the Uplink and Downlink direction. If the *UL Capacity Credit IE* is not present, then the internal resource capabilities of the Node B are modelled as shared resources between Uplink and Downlink.

General:

When the RESOURCE STATUS INDICATION message is used to report an error, only one cause value for all reported objects can be sent in one message. When the RESOURCE STATUS INDICATION message is used to clear errors, only all errors for one object can be cleared per message. It is not possible to clear one out of several errors for one object.

8.2.15.3 Abnormal Conditions

8.2.16 System Information Update

8.2.16.1 General

The System Information Update procedure performs the necessary operations in order for the Node B to apply the correct scheduling of and/or to include the appropriate contents to the system information segments broadcast on the BCCH.

8.2.16.2 Successful Operation

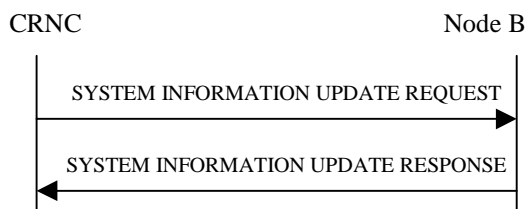


Figure 22: System Information Update procedure, Successful Operation

The procedure is initiated with a SYSTEM INFORMATION UPDATE REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

The Node B shall consider the requested updates to the BCCH schedule in the same order as the MIB/SB/SIB information is included in the SYSTEM INFORMATION UPDATE REQUEST message.

If the SYSTEM INFORMATION UPDATE REQUEST message includes the *BCCH Modification Time IE*, the updates to the BCCH schedule (possibly consisting of IB occurrence additions, IB occurrence deletions and IB occurrence contents updates) indicated in the SYSTEM INFORMATION UPDATE REQUEST message shall be applied by the Node B at the first time instance starting from the SFN value set by the *BCCH Modification Time IE*. If no *BCCH Modification Time IE* is included, the updates to the BCCH schedule shall be applied as soon as possible.

Information Block addition

If the SYSTEM INFORMATION UPDATE REQUEST message includes segments of a certain MIB/SB/SIB, the Node B shall assume that all segments for that Information Block are included in the message and ordered with increasing Segment Index (starting from 0). For each included segment, segment type information and *IB SG POS IE* are also given in the SYSTEM INFORMATION UPDATE REQUEST message.

The Node B shall determine the correct cell system frame number(s) (SFN) for transmission of the segments of system information, from the scheduling parameters provided in the SYSTEM INFORMATION UPDATE REQUEST message. The SFN for transmitting the segments shall be determined by the *IB SG REP IE* and *IB SG POS IE* such that:

- $SFN \bmod IB_SG_REP = IB_SG_POS$

If the SYSTEM INFORMATION UPDATE REQUEST message contains Master Information Block (MIB) segments in addition to SIB or SB segments, the MIB segments shall first be sent in the physical channel by the Node B. Once these MIB segments have been sent in the physical channel, the updated SB/SIB segments shall then be sent in the physical channel.

Only if the inclusion of each new IB segment in the BCCH schedule leads to a valid segment combination according to [18], the Node B shall accept the system information update.

If the *SIB Originator* IE value is set to "Node B", the Node B shall create the SIB segment of the SIB type given by the *IB Type* IE and autonomously update the SIB segment and apply the scheduling and repetition as given by the *IB SG REP* IE and *IB SG POS* IE.

SIBs originating from the Node B can only be SIBs containing information that the Node B can obtain on its own.

Information Block deletion

If an IB Deletion is indicated in an instance of *MIB/SB/SIB information* IE in the SYSTEM INFORMATION UPDATE REQUEST message, the Node B shall delete the IB indicated by the *IB Type* IE and *IB OC ID* IE from the transmission schedule on BCCH.

Information Block update

If the SYSTEM INFORMATION UPDATE REQUEST message contains segments for an IB without *IB SG REP* IE and *IB SG POS* IE and there is already an IB in the BCCH schedule with the same IB Type and IB OC ID which is not requested to be deleted from the BCCH schedule by an IB deletion indicated in a *MIB/SB/SIB information* IE repetition present in the SYSTEM INFORMATION UPDATE REQUEST message before the IB segments are included, then the Node B shall only update the contents of the IB segments without any modification in segment scheduling.

If the Node B successfully completes the updating of the physical channel scheduling cycle according to the parameters given in the SYSTEM INFORMATION UPDATE REQUEST message, it shall respond to the CRNC with a SYSTEM INFORMATION UPDATE RESPONSE message.

8.2.16.3 Unsuccessful Operation

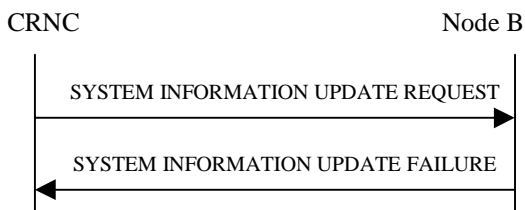


Figure 23: System Information Update procedure: Unsuccessful Operation

If the Node B is unable to update the physical channel scheduling cycle according to all the parameters given in the SYSTEM INFORMATION UPDATE REQUEST message, it shall respond with a SYSTEM INFORMATION UPDATE FAILURE message with an appropriate cause value. **No changes to the BCCH schedule are made in this case.**

The Node B shall not incorporate any of the requested changes into the physical channel scheduling cycle, and the previous system information configuration shall remain intact.

Typical cause values are:

Radio Network Layer Cause

- SIB Origination in Node B not Supported

Miscellaneous Cause

- Hardware failure
- Control Processing overload
- O&M Intervention

In the case of failure, the Node B shall not incorporate any of the requested changes into the physical channel scheduling cycle, and the previous system information configuration shall remain intact.

8.2.16.4 Abnormal Conditions

The Node B shall reject, with the cause value "SIB origination in Node B not supported", requests for Node B originated system information blocks that make use of a value tag.

The Node B shall reject the requested update with cause value "BCCH scheduling error" if:

- After having handled a certain *MIB/SB/SIB information* IE repetition, an illegal BCCH schedule results;
- If a ~~*MIB/SB/SIB Information*~~ *MIB/SB/SIB information* IE repetition includes an *IB SG REP* IE or an *IB SG POS* IE and there is already an IB in the BCCH schedule with the same IB Type and IB OC ID which is not requested to be deleted from the BCCH schedule by an IB deletion indicated in a *MIB/SB/SIB information* IE repetition present in the SYSTEM INFORMATION UPDATE REQUEST message before the IB addition is indicated. This rule shall apply even if the scheduling instructions in *IB SG REP* IE and *IB SG POS* IE were the same as the current scheduling instructions for the concerned IB;
- If a ~~*MIB/SB/SIB Information*~~ *MIB/SB/SIB information* IE repetition includes no *IB SG REP* IE and *IB SG POS* IE and there is no IB in the BCCH schedule with the same IB Type and IB OC ID;
- If a ~~*MIB/SB/SIB Information*~~ *MIB/SB/SIB information* IE repetition includes no *IB SG REP* IE and *IB SG POS* IE and there is already an IB in the BCCH schedule with the same IB Type and IB OC ID but it is requested to be deleted from the BCCH schedule by an IB deletion indicated in a *MIB/SB/SIB information* IE repetition present in the SYSTEM INFORMATION UPDATE REQUEST message before the IB addition is indicated.

8.2.17 Radio Link Setup

8.2.17.1 General

This procedure is used for establishing the necessary resources for a new Node B Communication Context in the Node B.

[FDD – The Radio Link Setup procedure is used to establish one or more radio links. The procedure establishes one or more DCHs on all radio links, and in addition, it can include the establishment of one or more DSCHs on one radio link.]

[TDD – The Radio Link Setup procedure is used ~~to~~ establish one radio link including one or more transport channels. The transport channels can be a mix of DCHs, DSCHs, and USCHs, including also combinations where one or more transport channel types are not present.]

8.2.17.2 Successful Operation

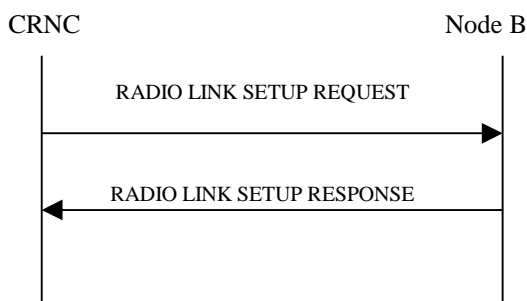


Figure 24: Radio Link Setup procedure, Successful Operation

The procedure is initiated with a RADIO LINK SETUP REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception of the RADIO LINK SETUP REQUEST message, the Node B shall reserve necessary resources and configure the new Radio Link(s) according to the parameters given in the message.

The Node B shall prioritise resource allocation for the RL(s) to be established according to Annex A.

Transport Channels Handling:

DCH(s):

[TDD – If the *DCH Information* IE is present, the Node B shall configure the new DCH(s) according to the parameters given in the message.]

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs, then, the Node B shall treat the DCHs in the *DCH Information* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.

[FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If the ~~*QE-Selector*~~ *QE-Selector IE* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]

For a set of co-ordinated DCHs, the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD - If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE, ref. [16].]

The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs ~~to be added~~ as the FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs ~~to be added~~ as the Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs ~~to be added~~ as the Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The received *Frame Handling Priority* IE specified for each Transport Channel should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new RL(s) has been activated.

[FDD – The *Diversity Control Field* IE indicates for each RL (except the first RL in the message) whether the Node B shall combine the concerned RL or not.

- If the *Diversity Control Field* IE is set to "May", then Node B shall decide for either of the alternatives.

- If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL.

- ~~If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.~~

Diversity combining is applied to Dedicated Transport Channels (DCH), i.e. it is not applied to the DSCHs. When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with. ~~If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.~~

[FDD – In the RADIO LINK SETUP RESPONSE message, the Node B shall indicate ~~for each RL~~ with the ~~*Diversity Indication IE*~~ *Diversity Indication in the RL Information Response IE* whether the RL is combined or not.

- In case of combining, ~~only~~ the ~~*Reference RL ID*~~ *Reference RL ID IE* ~~shall be included to~~ indicates one of the existing RLs that the concerned RL is combined with.

- In case of not combining, the Node B shall include **in the DCH Information Response IE** in the RADIO LINK SETUP RESPONSE message the *Binding ID IE* and *Transport Layer Address IE* for the transport bearer to be established for each DCH of this RL.]

[TDD – The Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID IE* and *Transport Layer Address IE* for the transport bearer to be established for each DCH of this RL.]

In the case of a set of co-ordinated DCHs, the *Binding ID IE* and the *Transport Layer Address IE* shall be specified for only one of the **DCHs in the set of** co-ordinated DCHs.

DSCH(s):

If the *DSCH Information IE* is present, the Node B shall configure the new DSCH(s) according to the parameters given in the message.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *TFCI2 Bearer Information IE* then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received. The Node B shall manage the time of arrival of these frames according to the values of ToAWS and ToAWE specified in the IE's. The *Binding ID IE* and the *Transport Layer Address IE* for the new bearer to be set up for this purpose shall be returned in the RADIO LINK SETUP RESPONSE message.]

The Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID IE* and the *Transport Layer Address IE* for the transport bearer to be established for each DSCH of this RL.

[TDD – USCH(s):

[TDD – If the *USCH Information IE* is present, the Node B shall configure the new USCH(s) according to the parameters given in the message.]

[TDD – In case If the *USCH Information IE* is present, the Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID IE* and the *Transport Layer Address IE* for the transport bearer to be established for each USCH of this RL.]

Physical Channels Handling:

[FDD - Compressed Mode]:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information IE*, the Node B shall store the information about the Transmission Gap Pattern Sequences to be used in the Compressed Mode Configuration. This Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or the Node B Communication Context is deleted.]

[FDD – If the *Downlink compressed mode method IE* in one or more Transmission Gap Pattern Sequence is set to "SF/2" in the RADIO LINK SETUP REQUEST message, the Node B shall use or not the alternate scrambling code as indicated for each DL Channelisation Code in the *Transmission Gap Pattern Sequence Code Information IE*.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information IE* and the *Active Pattern Sequence Information IE*, the Node B shall use the information to activate the indicated Transmission Gap Pattern Sequence(s) in the new RL. The received *CM Configuration Change CFN IE* refers to the latest passed CFN with that value. The Node B shall treat the received *TGCFN IEs* as follows:]

- [FDD - If any received *TGCFN IE* has the same value as the received *CM Configuration Change CFN IE*, the Node B shall consider the concerned Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD - If any received *TGCFN IE* does not have the same value as the received *CM Configuration Change CFN IE* but the first CFN after the *CM Configuration Change CFN IE* has already passed, the Node B shall consider the concerned Transmission Gap Pattern Sequence as activated at that CFN.]

- [FDD - For all other Transmission Gap Pattern Sequences included in the *Active Pattern Sequence Information IE*, the Node B shall activate each Transmission Gap Pattern Sequence at the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN IE* for the Transmission Gap Pattern Sequence.]

[FDD - DL Code Information]:

[FDD – When more than one DL DPDCH is assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]

General:

[FDD – If the *Propagation Delay IE* is included, the Node B may use this information to speed up the detection of L1 synchronisation.]

[FDD – The *UL SIR Target IE* included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control.]

[FDD – If the received *Limited Power Increase IE* is set to "*Used*", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control.]

[FDD – If the *TFCI Signalling Mode IE* within the RADIO LINK SETUP *REQUEST* message indicates that there shall be a hard split on the TFCI field but the *TFCI2 Bearer Information IE* is not included in the message, then the Node B shall transmit the TFCI2 field with zero power.]

[FDD - If the *TFCI Signalling Mode IE* within the RADIO LINK SETUP *REQUEST* message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information IE* is included in the message, then the Node B shall transmit the TFCI2 field with zero power until Synchronization is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer (see ref. [24]).]

Radio Link Handling:

[FDD - Transmit Diversity]:

[FDD – When the *Diversity Mode IE* is set to "*STTD*", "*Closedloop mode1*", or "*Closedloop mode2*", the Node B shall activate/deactivate the Transmit Diversity ~~to~~ for each Radio Link in accordance with the *Transmit Diversity Indication IE*.]

DL Power Control:

[FDD – The Node B shall start the DL transmission using the initial DL power specified in the message on each DL DPCH of the RL until either UL synchronisation on the Uu *interface* is achieved for the RLS or Power Balancing is activated. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) with DPC MODE=0 and the power control procedure (see subclause 8.3.7), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message. During compressed mode, the $P_{SIR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k .]

[TDD – The Node B shall start the DL transmission using the initial DL power specified in the message on each DL DPCH of the RL until the UL synchronisation on the Uu *interface* is achieved for the RL. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3), but shall always be kept within the maximum and minimum limit specified in the *RADIO LINK SETUP REQUEST* message.]

[TDD – If the *DL Time Slot ISCP Info IE* is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged].

[FDD – If the received *Inner Loop DL PC Status* IE is set to "Active", the Node B shall activate the inner loop DL power control for all RLS. If *Inner Loop DL PC Status* IE is set to "Inactive", the Node B shall deactivate the inner loop DL power control for all RLS according to ref. [10].]

General:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE and the *S-Field Length* IE, the Node B shall activate SSDT, if supported, using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

[FDD – Irrespective of SSDT activation, the Node B shall include in the RADIO LINK SETUP RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK SETUP REQUEST message requested SSDT activation and the RADIO LINK SETUP RESPONSE message indicates that the SSDT capability is supported for this RL, SSDT shall be activated in the Node B.]

The Node B shall start reception on the new RL(s) after the RLS are successfully established.

[FDD - Radio Link Set Handling]:

[FDD – The *First RLS Indicator* IE indicates if the concerned RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the Node B together with the value of the *DL TPC P_{pattern 01} Count* IE which the Node B has received in the Cell Setup procedure, to determine the initial TPC pattern in the DL of the concerned RL and all RLS which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication Context.]

[FDD – For all RLS having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication Context.]

[FDD – The UL out-of-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the maximum value of the parameters *N_OUTSYNC_IND* and *T_RLFAILURE*, and the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells supporting the radio links of the RL Set.]

Response Message:

If the RLS are successfully established, the Node B shall start reception on the new RL(s) and respond with a RADIO LINK SETUP RESPONSE message.

After sending of the RADIO LINK SETUP RESPONSE message, the Node B shall continuously attempt to obtain UL synchronisation on the Uu interface and start reception on the new RL. [FDD – The Node B shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16].] [TDD – The Node B shall start transmission on the new RL immediately as specified in [16].]

8.2.17.3 Unsuccessful Operation

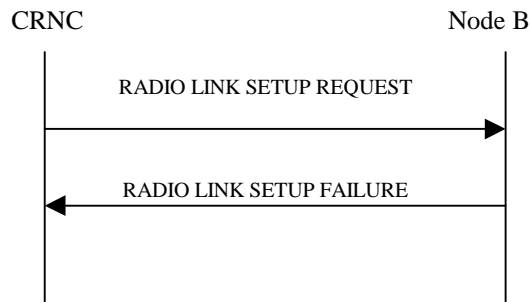


Figure 25: Radio Link Setup procedure: Unsuccessful Operation

If the establishment of at least one radio link is unsuccessful, the Node B shall respond with a RADIO LINK SETUP FAILURE message. The message contains the failure cause in the *Cause* IE.

[FDD – If some radio links were established successfully, the Node B shall indicate this in the RADIO LINK SETUP FAILURE message in the same way as in the RADIO LINK SETUP RESPONSE message. **In this case, the Node B shall include the *Communication Control Port Id* IE in the RADIO LINK SETUP FAILURE message.**]

Typical cause values are as follows:

Radio Network Layer Cause

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- Number of DL codes not supported
- Number of UL codes not supported
- UL SF not supported
- DL SF not supported
- Dedicated Transport Channel Type not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.17.4 Abnormal Conditions

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Active Pattern Sequence Information* IE, but the *Transmission Gap Pattern Sequence Information* IE is not present, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Radio Link Setup procedure as failed and shall respond with a RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCH Information* IE do not have the same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

8.2.18 Physical Shared Channel Reconfiguration [TDD]

8.2.18.1 General

This procedure is used for handling PDSCH Sets and PUSCH Sets in the Node B, i.e.

- Adding new PDSCH Sets and/or PUSCH Sets,
- Modifying these, and
- Deleting them.

8.2.18.2 Successful Operation

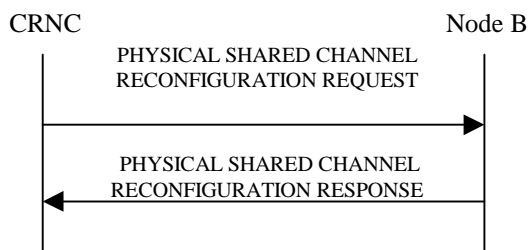


Figure 26: Physical Shared Channel Reconfiguration: Successful Operation

The procedure is initiated with a PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes an *SFN* IE, the Node B will shall activate the new configuration on that specified SFN.

PDSCH/PUSCH Addition

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be added, the Node B shall add these new sets to its PDSCH/PUSCH configuration.

PDSCH/PUSCH Modification

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be modified, and includes any of *TDD Channelisation Code* IE, *Midamble Sshift A and Bburst Ttype* IE, *Time Slot* IE, *TDD Physical Channel Offset* IE, *Repetition Period* IE, *Repetition Length* IE, or *TFCI pPresence* IE, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.

PDSCH/PUSCH Deletion

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be deleted, the Node B shall delete these new sets to from its PDSCH/PUSCH configuration.

In the successful case, the Node B shall add, modify and delete the PDSCH Sets and PUSCH Sets in the Common Transport Channel data base, as requested in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, and shall make these available to all the current and future DSCH and USCH transport channels, and The Node B shall respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.

8.2.18.3 Unsuccessful Operation

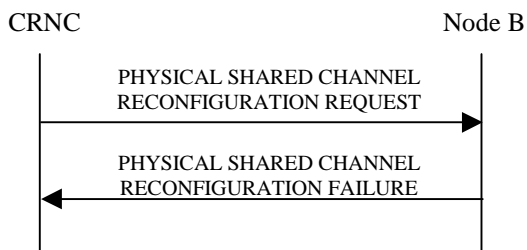


Figure 27: Physical Shared Channel Reconfiguration procedure: Unsuccessful Operation

If the Node B is not able to support all parts of the configuration, it shall reject the configuration of all the channels in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message. The Cause Value-IE shall be set to an appropriate value.

If the configuration was unsuccessful, the Node B shall respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell not available
- Node B Resources unavailable

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.18.4 Abnormal Conditions

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8.2.19 Reset

8.2.19.1 General

The purpose of the Rreset procedure is to align the resources in the CRNC and the Node B in the event of an abnormal failure. The CRNC or the Node B may initiate the procedure.

8.2.19.2 Successful Operation

8.2.19.2.1 Reset Initiated by the CRNC

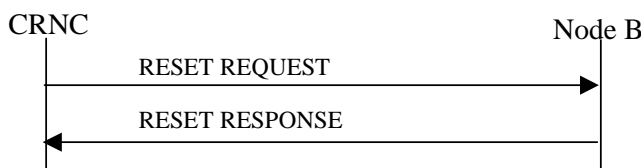


Figure 27A Reset procedure (CRNC to Node B), Successful Operation

The procedure is initiated with a RESET REQUEST message sent from the CRNC to the Node B **using the Node B Control Port**.

If the *Reset Indicator* IE is set to "Communication Context", the Node B shall remove all the indicated Node B Communication Contexts (typically identified by a *Node B Communication Context ID* IE) and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

If the *Reset Indicator* IE is set to "Communication Control Port", the Node B shall remove all the Node B Communication Contexts controlled via the indicated Communication Control Port(s) and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

If the *Reset Indicator* IE is set to "Node B", the Node B shall remove all the Node B Communication Contexts within the Node B and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

8.2.19.2.2 Reset Initiated by the Node B

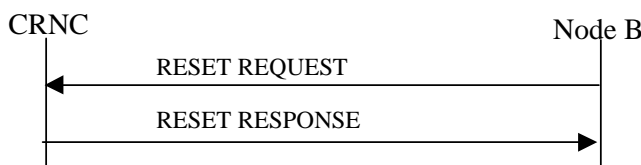


Figure 27B Reset procedure (Node B to CRNC), Successful Operation

The procedure is initiated with a RESET REQUEST message sent from the Node B to the CRNC **using the Node B Control Port**.

If the *Reset Indicator* IE is set to "Communication Context", for all indicated CRNC Communication Contexts (indicated by a *CRNC Communication Context ID* IE), the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the indicated CRNC Communication Contexts. After clearing all related resources, the CRNC shall return the RESET RESPONSE message to the Node B.

If the *Reset Indicator* IE is set to "Communication Control Port", for all the CRNC Communication Contexts controlled via the indicated Communication Control Port(s), the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the CRNC Communication Contexts controlled via the indicated Communication Control Port(s). After clearing all related resources, the CRNC shall return the RESET RESPONSE message to Node B.

If the *Reset Indicator* IE is set to the "Node B", for all the CRNC Communication Contexts related to this Node B, the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the CRNC

Communication Contexts related to this Node B. After clearing all related resources, the CRNC shall return the RESET RESPONSE message to Node B.

8.2.19.3 Unsuccessful Operation

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8.2.19.4 Abnormal Conditions

If the RESET REQUEST message is received any ongoing procedure related to a CRNC Communication Context in the CRNC or Node B Communication Context in the Node B indicated (explicitly or implicitly) in the message shall be aborted.

8.3 NBAP Dedicated Procedures

8.3.1 Radio Link Addition

8.3.1.1 General

This procedure is used for establishing the necessary resources in the Node B for one or more additional RLs towards a UE when there is already a Node B Communication Context for this UE in the Node B.

The Radio Link Addition procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.1.2 Successful Operation

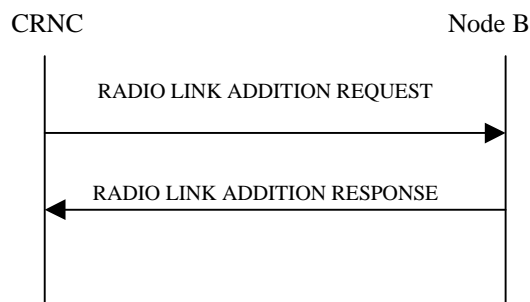


Figure: 28 Radio Link Addition procedure, Successful Operation

The procedure is initiated with a RADIO LINK ADDITION REQUEST message sent from the CRNC to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon reception, the Node B shall reserve the necessary resources and configure the new RL(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be established according to Annex A.

Physical Channels Handling:

[TDD – If the *UL DPCH Information* IE is present, the Node B shall configure the new UL DPCH(s) according to the parameters given in the message.]

[TDD – If the *DL DPCH Information* IE is present, the Node B shall configure the new DL DPCH(s) according to the parameters given in the message.]

[FDD - Compressed Mode]:

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Compressed Mode Deactivation Flag* IE with value "Deactivate", the Node B shall not activate any compressed mode pattern in the new RLs.

In all the other cases (Flag set to "Maintain Active" or not present), the ongoing compressed mode (if existing) shall be applied also to the added RLs.]

[FDD- If the RADIO LINK ADDITION REQUEST *message* contains the *Transmission Gap Pattern Sequence Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated for each DL Channelisation Code for which the *Transmission Gap Pattern Sequence Code Information* IE is set to "Code Change".]

[FDD - DL Code Information]:

[FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to ref. [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]

[TDD - CCTrCH Handling]:

[TDD – If the *UL CCTrCH Information* IE is present, the Node B shall configure the new UL CCTrCH(s) according to the parameters given in the message.]

[TDD – If the *DL CCTrCH Information* IE is present, the Node B shall configure the new DL CCTrCH(s) according to the parameters given in the message.]

Radio Link Handling:

Diversity Combination Control:

The *Diversity Control Field* IE indicates for each RL whether the Node B shall combine the new RL with existing RL(s) or not.

- If the *Diversity Control Field* IE is set to "May", the Node B shall decide for any of the alternatives.
- If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL.
- If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.

When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with. ~~If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.~~

In the case of combining an RL with existing RL(s), the Node B shall indicate with the *Diversity Indication in the RL Information Response IE* in the RADIO LINK ADDITION RESPONSE message with the *Diversity Indication* that the RL is combined. In this case, the *RL ID IE* Reference RL ID shall be included to indicate one of the existing RLs that the new RL is combined with.

In the case of not combining an RL with existing RL(s), the Node B shall indicate with the *Diversity Indication in the RL Information Response IE* in the RADIO LINK ADDITION RESPONSE message with the *Diversity Indication* that no combining is done. In this case, the Node B shall include in the *DCH Information Response IE* both the *Transport Layer Address IE* Transport Layer Address and the *Binding ID IE* binding ID for the transport bearer to be established for each DCH, [TDD – DSCH, USCH] of the RL in the RADIO LINK ADDITION RESPONSE message.

In the case of a set of co-ordinated DCHs, the *Binding ID IE* binding ID and the *Transport Layer Address IE* transport address shall be included for only one of the DCHs in a set of coordinated DCHs.

[TDD – The Node B shall include in the RADIO LINK ADDITION RESPONSE message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DSCH and USCH.]

[FDD - Transmit Diversity]:

[FDD – When the *Diversity Mode* IE is set to "STTD", "Closedloop mode1"; or "Closedloop mode2", the Node B shall activate/deactivate the Transmit Diversity ~~to~~for each Radio Link in accordance with the *Transmit Diversity Indication* IE.]

[FDD – When the *Transmit Diversity Indicator* IE is present, the Node B shall activate/deactivate the Transmit Diversity ~~to~~for each new Radio Link in accordance with the *Transmit Diversity Indicator* IE and the already known diversity mode.]

DL Power Control:

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall apply the given power to the transmission on each DL DPCH of the RL when starting transmission until either UL synchronisation on the Uu interface is achieved for the RLS or Power Balancing is activated. If no *Initial DL Transmission P_{power}* IE is included, the Node B shall use any transmission power level currently used on already existing RL's for this *Node B Communication Context*~~UE~~. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) with DPC MODE=0 and the downlink power control procedure (see subclause 8.3.7).]

[TDD – If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the RL when starting transmission until the UL synchronisation on the Uu interface is achieved for the RL. If no *Initial DL Transmission P_{power}* IE is included, the Node B shall use any transmission power level currently used on already existing RL's for this *Node B Communication Context*~~UE~~. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]

If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL p_{Power}* IE, the Node B shall store this value and not transmit with a higher power on any DL DPCH of the RL. If no *Maximum DL p_{Power}* IE is included, any Maximum DL power stored for already existing RLs for this *Node B Communication Context*~~UE~~ shall be applied. [FDD - During compressed mode, the $P_{SIR(k)}$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]

If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL p_{Power}* IE, the Node B shall store this value and never transmit with a lower power on any DL DPCH of the RL. If no *Minimum DL p_{Power}* IE is included, any Minimum DL power stored for already existing RLs for this *Node B Communication Context*~~UE~~ shall be applied.

[TDD – If the RADIO LINK ADDITION REQUEST message includes the *DL Time Slot ISCP Info* IE, the Node B shall use the indicated value when deciding the DL TX Power for each timeslot as specified in ref. [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged].

General:

[FDD – If the RADIO LINK ADDITION REQUEST message contains an *SSDT Cell Identity* IE, the Node B shall activate SSDT, if supported, for the concerned new RL, with the indicated SSDT cell identity used for that RL.]

The Node B shall start reception on the new RL(s) after the RLs are successfully established.

[FDD - Radio Link Set Handling]:

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication *C*ontext.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another new or existing RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication *C*ontext.]

[FDD – After addition of the new RL(s), the UL out-of-sync algorithm defined in [10] shall, for each of the previously existing and newly established RL Set(s), use the maximum value of the parameters *N_OUTSYNC_IND* and *T_RLFAILURE* and the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells

supporting the radio links of the RL Set. The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters N_INSYNC_IND, that are configured in the cells supporting the radio links of the RL Set.]

Response message:

If all requested RLs are successfully added, the Node B shall respond with a RADIO LINK ADDITION RESPONSE message.

After sending of the RADIO LINK ADDITION RESPONSE message, the Node B shall continuously attempt to obtain UL synchronisation on the Uu interface and start reception on the new RL. [FDD – The Node B shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16].] [TDD – The Node B shall start transmission on the new RL immediately as specified in [16].]

8.3.1.3 Unsuccessful Operation

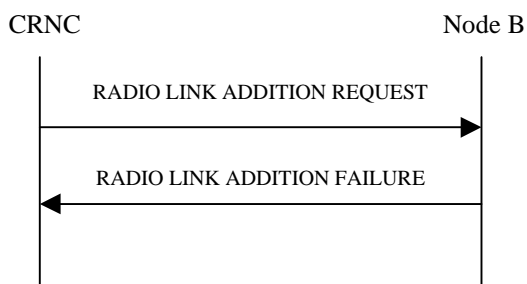


Figure 29: Radio Link Addition procedure: Unsuccessful Operation

If the establishment of at least one radio link is unsuccessful, the Node B shall respond with a RADIO LINK ADDITION FAILURE message. The message contains the failure cause in the Cause IE.

[FDD - If some RL(s) were established successfully, the Node B shall indicate this in the RADIO LINK ADDITION FAILURE message in the same way as in the RADIO LINK ADDITION RESPONSE message.]

Typical cause values are as follows:

Radio Network Layer Cause

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- UL SF not supported
- DL SF not supported
- Reconfiguration CFN not elapsed
- CM not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.1.4 Abnormal conditions

[FDD – If the RADIO LINK ADDITION REQUEST [message](#) contains the *Compressed Mode Deactivation Flag* IE with the value "Deactivate" when compressed mode is active for the existing RL(s), and at least one of the new RL is added in a cell that has the same UARFCN (both UL and DL) of at least one cell with an already existing RL, the Node B shall regard the Radio Link Addition procedure as failed and shall respond with a RADIO LINK ADDITION FAILURE message with the cause value "Invalid CM settings".]

8.3.2 Synchronised Radio Link Reconfiguration Preparation

8.3.2.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one [UE-UTRAN connection within a](#) Node B [Communication Context](#).

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.2.2 Successful Operation

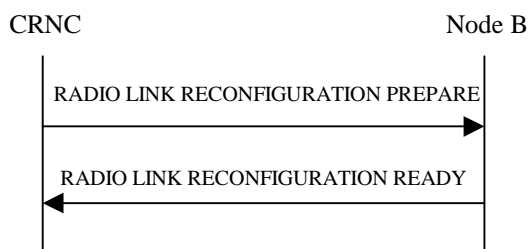


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the CRNC by sending the [message](#) RADIO LINK RECONFIGURATION PREPARE [message](#) to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Modify* IEs, then the Node B shall treat them each as follows:

- If the *DCHs to Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the UL of a DCH, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the DL of a DCH, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes multiple *DCH Specific Info* IEs, then the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.

- If the *DCHs to Modify* IE includes the *UL FP Mode* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs, then the Node B shall treat them each as follows:

- If the *DCHs to Add* IE includes multiple *DCH sSpecific Info* IEs ~~then~~, the Node B shall treat the DCHs in the *DCHs to Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If the ~~QE-Selector~~ *QE-Selector IE* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD – If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have the *QE-Selector* IE set to "'non-selected'", the Physical channel BER shall be used for the QE, ref. [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the ~~radio-Uu~~ interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated ~~DCHs~~ DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Delete* IEs, the Node B shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of co-ordinated DCHs in the new configuration.

Physical Channel Modification:

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *UL DPCH Information IE*, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *UL DPCH Information IE* includes the *Uplink Scrambling Code IE*, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD – If the *UL DPCH Information IE* includes the *Min UL Channelisation Code Length IE*, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPDCBs IE* (if it is included) in the new configuration.]
- [FDD – If the *UL DPCH Information IE* includes the *UL SIR Target IE*, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]
- [FDD – If the *UL DPCH Information IE* includes the *Puncture Limit IE*, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD – The Node B shall use the *TFCS IE* for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD – If the *UL DPCH Information IE* includes the *UL DPCCCH Slot Format IE*, the Node B shall set the new Uplink DPCCCH Structure to the new configuration.]
- [FDD - If the *UL DPCH Information IE* includes the *Diversity Mode IE*, the Node B shall apply diversity according to the given value.]
- [FDD – If the *UL DPCH Information IE* includes an *SSDT Cell Identity Length IE* and/or an *S-Field Length IE*, the Node B shall apply the values in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information IE*, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – The Node B shall use the *TFCS IE* for the DL (if it is present) when reserving resources for the downlink of the new configuration. The Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD – If the *DL DPCH Information IE* includes the *TFCI Signalling Mode IE* or the *TFCI Presence IE*, the Node B shall use the information when building TFCIs in the new configuration.]
- [FDD – If the *DL DPCH Information IE* includes the *DL DPCCCH Slot Format IE*, group the Node B shall set the new Downlink DPCCCH Structure to the new configuration.]
- [FDD – If the *DL DPCH Information IE* includes the *Multiplexing Position IE*, the Node B shall apply the indicated multiplexing type in the new configuration.]
- [FDD – If the *DL DPCH Information IE* includes the *Limited Power Increase IE* and the IE is set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information IE* includes the *Limited Power Increase IE* and the IE is set to "Not Used", the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information IE* includes the *PDSCH eCode mMapping IE*, then the Node B shall apply the defined mapping between TFCI values and PDSCH channelisation codes.]
- [FDD – If the *DL DPCH Information IE* includes the *PDSCH RL ID IE*, then the Node B shall infer that the PDSCH for the specified user will be transmitted on the defined radio link.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information IE*, the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Modify* or *DL CCTrCH to Modify* IEs, then the Node B shall treat them each as follows:]

- [TDD – If the IE includes any of *the TFCs IE*, *TFCI coding IE* or *Puncture Limit IE*, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]
- [TDD – If the IE includes any *UL DPCH #To #Add IE* or *DL DPCH #To #Add* IEs, the Node B shall include this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH #To #Delete IE* or *DL DPCH #To #Delete* IEs, the Node B shall remove this DPCH in the new configuration.]
- [TDD – If the IE includes any ~~UL~~*UL DPCH #To #Modify IE* or *DL DPCH #To #Modify* IEs, and includes any of *the Repetition Period IE*, *Repetition Length IE*, or *TDD DPCH Offset IE*, or the message includes UL/DL Timeslot Information and includes any of *the Midamble #Shift #And Burst Type IE*, *Time Slot IE*, or *TFCI #Presence IE*, or the message includes UL/DL Code information and includes *TDD Channelisation Code IE*, the Node B shall apply these specified information elements as the new values, otherwise the old values specified for this DPCH configuration are still applicable.]

[TDD – UL/DL CCTrCH Addition]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH #To Add IE* or *DL CCTrCH #To Add IE*, the Node B shall include this CCTrCH in the new configuration.]

[TDD – If the *UL/DL CCTrCH #To Add IE* includes any *UL/DL DPCH Information IE*, the Node B shall reserve necessary resources for the new configuration of the UL/DL DPCH(s) according to the parameters given in the message.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL CCTrCH #To Add IE*, the Node B shall set the TPC step size of that CCTrCH to the same value as the lowest numbered DL CCTrCH in the current configuration.]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any UL or DL CCTrCH to be deleted, the Node B shall remove this CCTrCH in the new configuration.]

DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH #To #Add/modify*, *DSCH #To #add/Modify* or *DSCH #To #Delete* IEs, then the Node B shall use this information to add/modify/delete the indicated DSCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.

The Node B shall include in the RADIO LINK–RECONFIGURATION READY message both the *Transport Layer Address IE* and the *Binding ID IE* for the transport bearer to be established for each DSCH.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Information IE*, then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received if one does not already exist or shall apply the new values if such a bearer does already exist. The *Binding ID IE* and *Transport Layer Address IE* of any new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message. If the RADIO LINK RECONFIGURATION PREPARE message specifies that the TFCI2 transport bearer is to be deleted, then the Node B shall release the resources associated with that bearer in the new configuration.]

[FDD – If the *TFCI Signalling Mode IE* within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI field but a TFCI2 transport bearer has not already been set up and *TFCI2 Bearer Information IE* is not included in the message, then the Node B shall transmit the TFCI2 field with zero power in the new configuration.]

[FDD – If the *TFCI Signalling Mode IE* within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information IE* is included in the message, then the Node B shall transmit the TFCI2 field with zero power until Synchronisation is achieved on the TFCI2 transport bearer

and the first valid DSCH TFCI Signalling control frame is received on this bearer in the new configuration (see ref. [24]).]

[TDD – USCH Addition/Modification/Deletion:]

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]
- [TDD – The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each USCH.]

RL Information:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B may activate SSDT using the *SSDT Cell Identity* IE in the new configuration.]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the Node B shall deactivate SSDT in the new configuration.]
- [FDD – If the *RL Information* IE includes a *DL Code Information* IE containing a *DL Scrambling Code* IE, the Node B shall apply the values in the new configuration.]
- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- If the *RL Information* IE includes the *Maximum DL Power* and/or the *Minimum DL Power* IEs, the Node B shall apply the values in the new configuration. [FDD - During compressed mode, the $P_{SIR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k .]
- [TDD – If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall apply the given power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included with a new CCTrCH, the Node B shall use any transmission power level currently used on already existing CCTrCHs when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]

General

If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exists a Prepared Reconfiguration, as defined in subclause 3.1.

In the RADIO LINK RECONFIGURATION READY message, the Node B shall include the *RL Information Response* IE for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address IE and the Binding ID IE in the DCH Information Response IE* ~~Transport Layer Address and the Binding ID~~ for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In case of a DCH requiring a new transport bearer on Iub, the *Transport Layer Address IE* and the *Binding ID IE* shall be included in the *DCH Information Response IE*.

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iub interface, the *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* shall be included only for one of the DCH in the set of co-ordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the Node B, the *RL Information Response* ~~*RL Information Response*~~ IE shall be included only for one of the combined RLS. The *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* shall be included only for one of the combined Radio Links.

8.3.2.3 Unsuccessful Operation

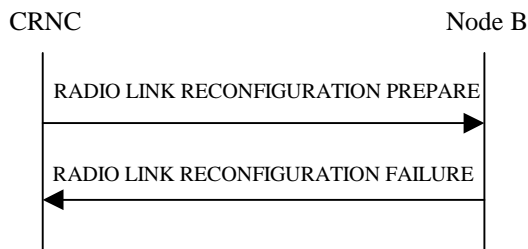


Figure 31: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

If the Node B cannot reserve the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be added, it shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed.

If the requested Synchronised Radio Link Reconfiguration Preparation procedure fails for one or more RLS, the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

Radio Network Layer Cause

- UL SF not supported
- DL SF not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- Number of DL codes not supported
- Number of UL codes not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.2.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and ~~the Node B~~ shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "~~selected~~"], the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE" and SSDT is not active in the current configuration, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed if the *UL DPCH Information* IE does not include the *SSDT Cell Identity Length* IE. In this case, it shall respond with a RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message includes a *DCHs \dagger To Modify* IE or *DCHs \dagger To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs \dagger To Modify* IE or *DCHs \dagger To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-sStatic Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

8.3.3 Synchronised Radio Link Reconfiguration Commit

8.3.3.1 General

This procedure is used to order the Node B to switch to the new configuration for the Radio Link(s) within the Node B, previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure.

The message shall use the Communication Control Port assigned for this Node B Communication Context.

8.3.3.2 Successful Operation

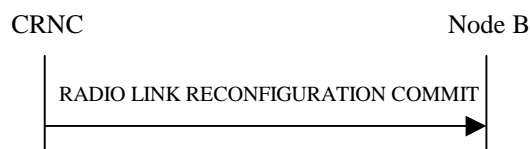


Figure 32: Synchronised Radio Link Reconfiguration Commit procedure, Successful Operation

The Node B shall switch to the new configuration previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure at the next coming CFN with a value equal to the value requested by the CRNC in the *CFN* IE when receiving the RADIO LINK RECONFIGURATION COMMIT message from the CRNC.

[FDD – If the *Active Pattern Sequence Information* IE is included in the RADIO LINK RECONFIGURATION COMMIT message, the *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE shall be ignored by the Node B.]

When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

In the case of a transport channel modification for which a new transport bearer was requested and established, the switch to the new transport bearer shall also take place at the indicated CFN. The detailed frame protocol handling during transport bearer replacement is described in [16], subclause 5.10.1 and in [24], subclause 5.8.2.

[FDD – If the RADIO LINK RECONFIGURATION COMMIT includes the *Active Pattern Sequence Information* IE, the Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the *CFN*. From that moment on, all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions shall be started when the indicated *TGCFN* IE elapses. The *CFN* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value. If the values of the *CFN* IE and the *TGCFN* IE are equal, the concerned Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CFN* IE.]

8.3.3.3 Abnormal Conditions

If a new transport bearer is required for the new reconfiguration and it is not available at the requested CFN, the Node B shall initiate the Radio Link Failure procedure.

8.3.4 Synchronised Radio Link Reconfiguration Cancellation

8.3.4.1 General

This procedure is used to order the Node B to release the new configuration for the Radio Link(s) within the Node B, previously prepared by the Synchronised Radio Link Preparation Reconfiguration procedure.

The message shall use the Communication Control Port assigned for this Node B Communication Context.

8.3.4.2 Successful Operation

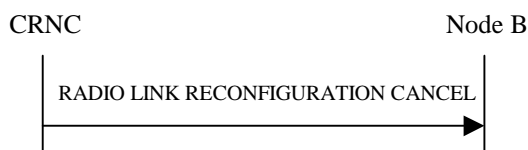


Figure 33: Synchronised Radio Link Reconfiguration Cancellation procedure, Successful Operation

When receiving the RADIO LINK RECONFIGURATION CANCEL message from the CRNC, the Node B shall release the new configuration ([FDD - including the new Transmission Gap Pattern Sequence parameters (if existing)]) previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure and continue using the old configuration. When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

8.3.4.3 Abnormal Conditions

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8.3.5 Unsynchronised Radio Link Reconfiguration

8.3.5.1 General

The Unsynchronised Radio Link Reconfiguration procedure is used to reconfigure Radio Link(s) related to one UE-UTRAN connection within a Node B.

The Unsynchronised Radio Link Reconfiguration procedure is used when there is no need to synchronise the time of the switching from the old to the new configuration in one Node B used for a UE-UTRAN connection with any other Node B also used for the UE-UTRAN connection.

The Unsynchronised Radio Link Reconfiguration procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.5.2 Successful Operation

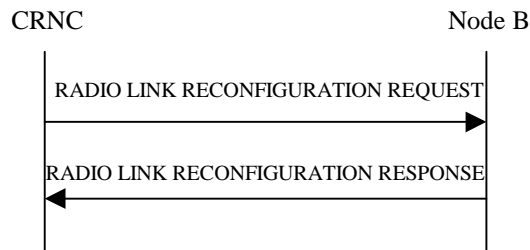


Figure 34: Unsynchronised Radio Link Reconfiguration Procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the CRNC by sending the **message** RADIO LINK RECONFIGURATION REQUEST **message** to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs #To Modify* IEs, then the Node B shall treat them each as follows:

- If the *DCHs #To Modify* IE includes ~~on~~ the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received *Frame Handling Priority* should be used when prioritising between different frames in the downlink on the **radio-Uu** interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs #To Modify* IE includes the *Transport Format Set* IE for the UL, the Node B shall apply the new *Transport Format Set* in the Uplink of this DCH in the new configuration.
- If the *DCHs #To Modify* IE includes the *Transport Format Set* IE for the DL, the Node B shall apply the new *Transport Format Set* in the Downlink of this DCH in the new configuration.
- If the *DCHs #To Modify* IE includes multiple *DCH Specific Info* IEs, then the Node B shall treat the DCHs in the *DCHs #To Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs #To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new *FP Mode* in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs #To Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new *ToAWS* in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs #To Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new *ToAWE* in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the Downlink of this DCH in the new configuration.]
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCH #To Add* IEs, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCHs in the new configuration. In particular:

- If a *DCHs #To Add* IE includes multiple *DCH Specific Info* IEs for a DCH to be added, the Node B shall treat the DCHs in the *DCHs #To Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD - For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Node B shall use the Transport channel BER from that DCH as the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If the ~~*QE-Selector*~~ *QE-Selector IE* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Node B shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" as the QE in the UL data frames [16]. [FDD – If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If all DCHs have the *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the *radio-Uu* interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be **added/modified**, the Node B shall apply the new CCTrCH ID in the downlink of this DCH in the new configuration.]
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be **added/modified**, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the Node B shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of co-ordinated DCHs in the new configuration.

[FDD - Physical Channel Modification:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *UL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *UL DPCH Information* IE includes the *TFCS* IE for the UL, the Node B shall apply the new TFCS in the Uplink of the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes a *DL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *DL DPCH Information* IE includes on the *TFCS* IE for the DL, the Node B shall apply the new TFCS in the Downlink of the new configuration.]

- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE, the Node B shall use the ~~use the~~ information when building TFCIs in the new configuration.
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE ~~and the IE is set to "Used"~~, the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE ~~message~~ includes the *Limited Power Increase* IE ~~and the IE is set to "Not Used"~~, the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH #To #Modify* IE or *DL CCTrCH #To #Modify* IE in the Radio Link(s), the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message.]

[TDD – If the *UL/DL CCTrCH #To #Modify* IE includes *TFCS* IE, and/or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH #To #Delete* IE or *DL CCTrCH #To #Delete* IE, the Node B shall not include this CCTrCH in the new configuration.]

RL Information:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Information* IE, the Node B shall treat it as follows:

- If the *RL Information* IE includes the *Maximum DL Power* IE, the Node B shall apply this value to the new configuration and never transmit with a higher power on any Downlink DPCH of the Radio Link once the new configuration is being used. ~~[FDD - During compressed mode, the $P_{SR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]~~
- If the *RL Information* IE includes the *Minimum DL Power* IE, the Node B shall apply this value to the new configuration and not transmit with a lower power on any Downlink DPCH of the Radio Link once the new configuration is being used. ~~[FDD – During compressed mode, the $P_{SR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]~~
- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]

General

If the requested modifications are allowed by the Node B, the Node B has successfully allocated the required resources, and changed to the new configuration, it shall respond to the CRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

In the RADIO LINK RECONFIGURATION RESPONSE message, the Node B shall include the *RL Information Response* IE for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. The detailed frame protocol handling during transport bearer replacement is described in [16], subclause 5.10.1.

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iub interface, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the DCH in the set of coordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the Node B, the *RL Information Response* IE shall be included only for one of the combined Radio Links. The *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

8.3.5.3 Unsuccessful Operation

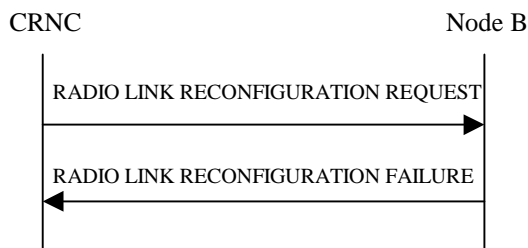


Figure 35: Unsyncronised Radio Link Reconfiguration procedure, Unsuccessful Operation

If the Node B cannot allocate the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be set-up, it shall regard the Unsyncronised Radio Link Reconfiguration procedure as having failed.

If the requested Unsyncronised Radio Link Reconfiguration procedure fails for one or more Radio Link(s), the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

Radio Network Layer Cause

- CM not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.5.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Unsyncronised Radio Link Reconfiguration procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

[FDD – If the *RL Information* IE contains the *DL Code Information* IE and this IE includes *DL Scrambling Code* and *FDD DL Channelisation Code Number* IEs not matching the DL Channelisation code(s) already allocated to the Radio Link identified by *RL ID* IE, then the Node B shall consider the Unsyncronised Radio Link Reconfiguration procedure as having failed and it shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Unsyncronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes a *DCHs #To Modify* IE or *DCHs #To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs #To Modify* IE or *DCHs #To Add* IE do not have the

same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

8.3.6 Radio Link Deletion

8.3.6.1 General

The Radio Link Deletion procedure is used to release the resources in a Node B for one or more established radio links towards a UE.

The Radio Link Deletion procedure may be initiated by the CRNC at any time when the Node B Communication Context exists.

8.3.6.2 Successful Operation

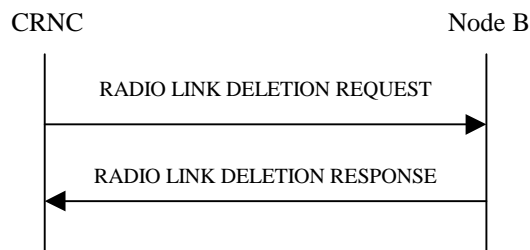


Figure 36: Radio Link Deletion procedure, Successful Operation

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the CRNC to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon receipt of this message, the Node B shall delete the radio link(s) identified by the *RL ID* IE, *Node B Communication ID* IE and *CRNC Communication ID* IE and release all associated resources and respond to the CRNC with a RADIO LINK DELETION RESPONSE message.

[FDD – After deletion of the RL(s), the UL out-of-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the maximum value of the parameters *N_OUTSYNC_IND* and *T_RLFAILURE*, and the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells supporting the radio links of the RL Set and the UL in-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the minimum value of the parameters *N_INSYNC_IND* that are configured in the cells supporting the radio links of the RL Set].

8.3.6.3 Unsuccessful Operation

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8.3.6.4 Abnormal Conditions

If the RL indicated by the *RL ID* IE, *Node B Communication ID* IE and *CRNC Communication ID* IE does not exist, the Node B shall respond with the RADIO LINK DELETION RESPONSE message and use the *CRNC Communication Context ID* IE received in the RADIO LINK DELETION REQUEST message.

8.3.7 Downlink Power Control [FDD]

8.3.7.1 General

The purpose of this procedure is to balance the DL transmission powers of one or more Radio Links used for the related UE-UTRAN connection within the Node B. The Downlink Power Control procedure may be initiated by the CRNC at any time when the Node B Communication Context exists, irrespective of other ongoing CRNC initiated dedicated NBAP procedures towards this Node B Communication Context. The only exception occurs when the CRNC has requested the deletion of the last RL via this Node B, in which case the Downlink Power Control procedure shall no longer be initiated.

8.3.7.2 Successful Operation



Figure 37: Downlink Power Control procedure, Successful Operation

The procedure is initiated by the CRNC sending a DL POWER CONTROL REQUEST message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

The *Power Adjustment Type* IE defines the characteristic of the power adjustment.

If the value of the *Power Adjustment Type* IE is *Common* "Common", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "Common". As long as the Power Balancing Adjustment Type of the Node B Communication Context is set to "Common", the Node B shall perform the power adjustment (see below) for all existing and future radio links associated with the context identified by the *Node B Communication Context ID* IE and use a common DL reference power level.

If the value of the *Power Adjustment Type* IE is *Individual* "Individual", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "Individual". The Node B shall perform the power adjustment (see below) for all radio links addressed in the message using the given DL Reference Powers per RL. If the Power Balancing Adjustment Type of the Node B Communication Context was set to "Common" before this message was received, power balancing on all radio links not addressed by the DL POWER CONTROL REQUEST message shall remain to be executed in accordance with the existing power balancing parameters which are now considered RL individual parameters. Power balancing will not be started on future radio links without a specific request.

If the value of the *Power Adjustment Type* IE is *None* "None", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "None" and the Node B shall suspend on-going power adjustments for all radio links for the *Node B Communication UE* Context.

If the *Inner Loop DL PC Status* IE is present and set to "Active", the Node B shall activate inner loop DL power control for all radio links for the Node B *Communication Context*. If the *Inner Loop DL PC Status* IE is present and set to "Inactive", the Node B shall deactivate inner loop DL power control for all radio links for the Node B *Communication Context* according to ref. [10].

Power Adjustment

The power balancing adjustment shall be superimposed on the inner loop power control adjustment (see Ref. [10]) if activated. The power balancing adjustment shall be such that:

$$\sum P_{bal} = (1 - r)(P_{ref} + P_{P-CPICH} - P_{init}) \text{ with an accuracy of } \pm 0.5 \text{ dB}$$

where the sum is performed over an adjustment period corresponding to a number of frames equal to the value of the *Adjustment Period* IE, P_{ref} is the value of the *DL Reference Power* IE, $P_{P-CPICH}$ is the power used on the primary CPICH, P_{init} is the code power of the last slot of the previous adjustment period and r is given by the *Adjustment Ratio* IE. If the last slot of the previous adjustment period is within a transmission gap due to compressed mode, P_{init} shall be set to the same value as the code power of the slot just before the transmission gap.

The adjustment within one adjustment period shall in any case be performed with the constraints given by the *Max Adjustment Step* IE and the DL TX power range set by the CRNC.

The power adjustments shall be started at the first slot of a frame with CFN modulo the value of *Adjustment Period* IE equal to 0 and shall be repeated for every adjustment period and shall be restarted at the first slot of a frame with CFN=0, until a new DL POWER CONTROL REQUEST message is received or the RL is deleted.

8.3.7.3 Abnormal Conditions

8.3.8 Dedicated Measurement Initiation

8.3.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on dedicated resources in a Node B.

The Dedicated Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.8.2 Successful Operation

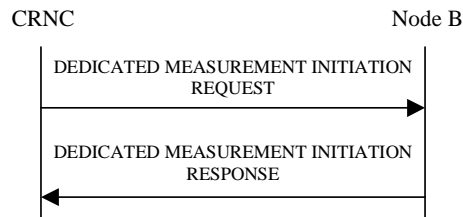


Figure 38: Dedicated Measurement Initiation procedure, Successful Operation

The procedure is initiated with a DEDICATED MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the Ceommunication Ceontrol Pport assigned to the Node B Ceommunication Ceontext.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below the meaning of the parameters are given in other specifications.

If the *Node B Communication Context ID* IE equals the reserved value "All NBCC", this measurement request shall apply for all current and future Node B Communication Contexts controlled via the Communication Control Port on which the DEDICATED MEASUREMENT INITIATION REQUEST message was received. Otherwise, this measurement request shall apply for the requested Node B Communication Context ID only.

If the *Node B Communication Context ID* IE equals the reserved value "All NBCC", the measurement request shall be treated as a single measurement, despite applying to multiple contexts. This means that it may only be terminated or failed on "All NBCC".

If the *Node B Communication Context ID* IE equals the reserved value "All NBCC", the measurement shall be initiated only for those Node B Communication Contexts handling a mode (FDD or TDD) for which the concerned measurement is specified in [4] and [5].

If the *Dedicated Measurement Object Type* IE is set to Dedicated Measurement Object Type is indicated as being "RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all indicated Radio Links.

[FDD – If the *Dedicated Measurement Object Type* IE is set to Dedicated Measurement Object Type is indicated as being "RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all indicated Radio Link Sets.]

[FDD - If the *Dedicated Measurement Object Type* IE is set to Dedicated Measurement Object Type is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all current and future Radio Links within the Node B Communication Context.]

[TDD - If the *Dedicated Measurement Object Type* IE is set to Dedicated Measurement Object Type is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for one existing DPCH per CCTrCH in each used time slot of current and future Radio Links within the Node B Communication Context, provided the measurement type is applicable to the respective DPCH.]

[FDD – If the *Dedicated Measurement Object Type* IE is set to Dedicated Measurement Object Type is indicated as being "ALL RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all existing and future Radio Link Sets within the Node B Communication Context.]

[TDD – If the *DPCH ID* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually. If no *DPCH ID* IE is provided within the RL Information, the measurement request shall apply for one existing DPCH per CCTrCH in each used time slot of the Radio Link, provided the measurement type is applicable to this DPCH]

If the *CFN Reporting Indicator* IE is set to "FN Reporting Required", the *CFN* IE shall be included in the **DEDICATED MEASUREMENT REPORT message measurement report** or in the **DEDICATED MEASUREMENT RESPONSE message measurement response**, the latter only in the case the *Report Characteristics* IE is set to "'On-Demand'". The reported CFN shall be the CFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *CFN* IE is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

Report characteristics

The *Report Characteristics* IE ~~is set to~~ **indicates** how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to "'On-Demand'", the Node B shall return the result of the measurement immediately.

If the *Report Characteristics* IE is set to "'Periodic'", the Node B shall periodically initiate the Dedicated Measurement Report procedure for this measurement, with the requested report frequency.

If the *Report Characteristics* IE is set to "'Event A'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If **the Measurement Hysteresis Time IE is not included no hysteresis time is given**, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "'Event B'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If **the Measurement Hysteresis Time IE is not included no hysteresis time is given**, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "'Event C'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the ~~rising~~ **falling** time **specified by the Measurement Change Time IE** has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to "'Event D'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the ~~falling~~ **rising** time **specified by the Measurement Change Time IE** has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to "'Event E'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If **the Measurement Threshold 2 IE 'Measurement Threshold 2'** is not present, the Node B shall use **the value of the Measurement Threshold 1 IE 'Measurement Threshold 1'** instead. If **the Measurement Hysteresis Time IE is not included no 'Measurement Hysteresis Time' is provided**, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to "'Event F'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If **the Measurement Threshold 2 IE 'Measurement Threshold 2'** is not present, the Node B shall use **the value of the Measurement Threshold 1 IE 'Measurement Threshold 1'** instead. If **the**

~~Measurement Hysteresis Time IE is not included~~no "Measurement Hysteresis Time" is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is not set to "On-Demand", the Node B is required to perform reporting for a dedicated measurement object, in accordance with the conditions provided in the DEDICATED MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no dedicated measurement object(s) for which a measurement is defined exists any-more, the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Dedicated Measurement Reporting procedure immediately, and then continue with the measurements as specified in the DEDICATED MEASUREMENT INITIATION REQUEST message.

Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the DEDICATED MEASUREMENT INITIATION RESPONSE, DEDICATED MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n)

$a = 1/2^{(k/2)}$, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

Response message

If the Node B was able to initiate the measurement requested by the CRNC, it shall respond with the DEDICATED MEASUREMENT INITIATION RESPONSE message using the *Communication Control Port* assigned to the Node B *Communication Context*. The message shall include the same Measurement ID that was used in the measurement request.

Only in the case where ~~the~~ *Report Characteristics* IE is set to "On-Demand", the DEDICATED MEASUREMENT INITIATION RESPONSE message shall contain the measurement result. In this case, also the *Dedicated Measurement Object* IE shall be included if it was included in the request message.

In the case ~~that where~~ the *Node B Communication Context ID* IE is set to "All NBCC", the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE shall be set to the value "All CRNCCC", which is reserved for this purpose.

Interaction with Reset Procedure

If a measurement has been requested with the *Node B Communication Context ID* IE set to "All NBCC", the Node B shall terminate the measurement locally if either the CRNC or the Node B initiates the Reset procedure for the relevant Communication Control Port or the entire Node B.

8.3.8.3 Unsuccessful Operation

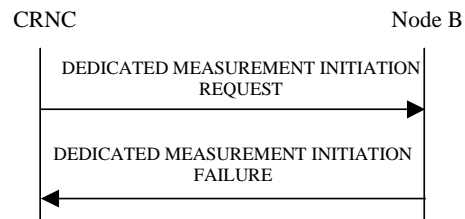


Figure 39: Dedicated Measurement Request-Initiation procedure: Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a DEDICATED MEASUREMENT INITIATION FAILURE message using the C_{e} ommunication C_{e} ontrol P_{p} ort assigned to the Node B C_{e} ommunication C_{e} ontext. The message shall include the same Measurement ID that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

In the case that where the *Node B Communication Context ID* IE is set to " All NBCC ", the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION FAILURE shall be set to the value " All CRNCCC ", which is reserved for this purpose.

Typical cause values are as follows:

Radio Network Layer cause

- Measurement not supported for the object
- Measurement Temporarily not Available

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.8.4 Abnormal Conditions

If the Dedicated Measurement Type received in the *Dedicated Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Dedicated Measurement Object Type received in the *Dedicated Measurement Object Type* IE in the DEDICATED MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

8.3.9 Dedicated Measurement Reporting

8.3.9.1 General

This procedure is used by the Node B to report the result of measurements requested by the CRNC with the Dedicated Measurement Initiation procedure. The Node B may initiate the Dedicated Measurement Reporting procedure at any time after establishing a Radio Link, as long as the Node B e_{c} ommunication e_{c} ontext exists.

8.3.9.2 Successful Operation



Figure 40: Dedicated Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the Node B shall initiate the Dedicated Measurement Reporting procedure. The DEDICATED MEASUREMENT REPORT message shall use the *Ce*ommunication *Ce*ontrol *Pp*ort assigned to the Node B *Ce*ommunication *Ce*ontext. If the measurement was initiated (by the Dedicated Measurement Initiation procedure) for multiple dedicated measurement objects, the Node B may include measurement values for multiple objects in the DEDICATED MEASUREMENT REPORT message. Unless specified below, the meaning of the parameters are given in other specifications.

The *Dedicated Measurement ID* IE shall be set to the *Dedicated Measurement ID* provided by the CRNC when initiating the measurement with the Dedicated Measurement Initiation procedure.

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see ref.[22] and [23]), the Measurement not available shall be reported.

8.3.9.3 Abnormal Conditions

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8.3.10 Dedicated Measurement Termination

8.3.10.1 General

This procedure is used by the CRNC to terminate a measurement previously requested by the Dedicated Measurement Initiation procedure.

The Dedicated Measurement Termination procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.10.2 Successful Operation

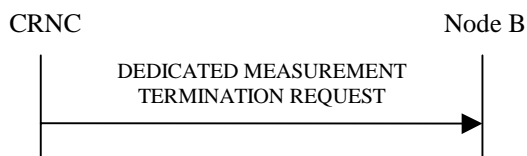


Figure 41: Dedicated Measurement Termination procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT TERMINATION REQUEST message, sent from the CRNC to the Node B using the *Ce*ommunication *Ce*ontrol *Pp*ort assigned to the Node B *Ce*ommunication *Ce*ontext.

Upon reception, the Node B shall terminate reporting of *dedicated* measurements corresponding to the received *Measurement ID IE* *Dedicated Measurement ID*.

8.3.10.3 Abnormal Conditions

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8.3.11 Dedicated Measurement Failure

8.3.11.1 General

This procedure is used by the Node B to notify the CRNC that a measurement previously requested by the Dedicated Measurement Initiation procedure can no longer be reported. The Node B is allowed to initiate the DEDICATED MEASUREMENT FAILURE INDICATION message at any time after having sent the RADIO LINK SETUP RESPONSE message, as long as the Node B Ceommunication Ceontext exists.

8.3.11.2 Successful Operation



Figure 42: Dedicated Measurement Failure procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT FAILURE INDICATION message, sent from the Node B to the CRNC using the Ceommunication Ceontrol Pport assigned to the Node B Ceommunication Ceontext, to inform the CRNC that a previously requested measurement can no longer be reported. The Node B has locally terminated the indicated measurement.

If the failed measurement was initiated with the *Node B Communication Context ID* IE set to the reserved value "All NBCC" and the Node B has terminated the measurement reporting of the measurement corresponding to the Measurement ID indicated in the DEDICATED MEASUREMENT FAILURE INDICATION message, the *CRNC Communication Context ID* IE shall be set to the value "2All CRNCCC2".

8.3.11.3 Abnormal Conditions

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8.3.12 Radio Link Failure

8.3.12.1 General

This procedure is used by the Node B to indicate a failure in one or more Radio Links [FDD - or Radio Link Sets][TDD or CCTrCHs within a Radio Link].

The Node B may initiate the Radio Link Failure procedure at any time after establishing a Radio Link.

8.3.12.2 Successful Operation



Figure 43: Radio Link Failure procedure, Successful Operation

When the Node B detects that one or more Radio Link [FDD - or Radio Link Sets] [TDD – or CCTrCHs within a Radio Link] is-are no longer available, it sends the RADIO LINK FAILURE INDICATION message to the CRNC indicating

the failed Radio Links or Radio Link Sets or CCTrCHs with the most appropriate cause values in the *Cause IE*. The message shall use the Communication Control Port assigned to the concerned Node B Communication Context.

If the failure concerns one or more individual Radio Links, the Node B shall indicate the affected Radio Link(s) using the *RL Information IE*. [FDD - The Node B shall indicate the affected Radio Link Set(s) using the *RL Set Information IE*.] [TDD – If the failure concerns only the failure of one or more CCTrCHs within a radio link, the Node B shall indicate the affected CCTrCHs using the *CCTrCH ID IE*.]

When the Radio Link Failure procedure is used to notify the loss of UL synchronisation of a [FDD – Radio Link Set] [TDD – Radio Link or CCTrCHs within a Radio Link] on the Uu interface, the **RADIO LINK FAILURE INDICATION** message shall be sent, with the *Cause IE set to cause value "Synchronisation Failure"*, when indicated by the UL out-of-sync algorithm defined in [10] and [21]. [FDD – The algorithms in [10] shall use the maximum value of the parameters N_OUTSYNC_IND and T_RLFailure, and the minimum value of the parameters N_INSYNC_IND, that are configured in the cells supporting the radio links of the RL Set.]

[FDD – When the Radio Link Failure procedure is used to indicate permanent failure in one or more Radio Links/Radio Link Sets due to the occurrence of an UL or DL frame with more than one transmission gap caused by one or more compressed mode pattern sequences, the DL transmission shall be stopped and the RADIO LINK FAILURE INDICATION message shall be sent with the cause value "Invalid CM Settings". After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the Node B shall not remove the Radio Link(s)/Radio Link Set(s) from the **Node B Communication UE** Context, or the **Node B Communication UE** Context itself.]

In the other cases, the Radio Link Failure procedure is used to indicate that one or more Radio Links/Radio Link Sets are permanently unavailable and cannot be restored. After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the Node B shall not remove the Radio Link/Radio Link Set from the **Node B Communication UE** Context, or the **Node B Communication UE** Context itself. When applicable, the retention priorities associated with the transport channels shall be used by the Node B to prioritise which Radio Links/Radio Link Sets to indicate as unavailable to the CRNC.

Typical cause values are:

Radio Network Layer Causes:

- Synchronisation Failure
- Invalid CM settings

Transport Layer Causes:

- Transport Resources Unavailable

Miscellaneous Causes:

- Control Processing Overload
- HW Failure
- O&M Intervention

8.3.12.3 Abnormal Conditions

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8.3.13 Radio Link Restoration

8.3.13.1 General

This procedure is used by the Node B to notify the achievement and re-achievement of uplink synchronisation of one or more [FDD - Radio Link Sets][TDD – Radio Links or CCTrCHs within a Radio Link] on the Uu interface.

The Node B may initiate the Radio Link Restoration procedure at any time after establishing a Radio Link.

8.3.13.2 Successful Operation

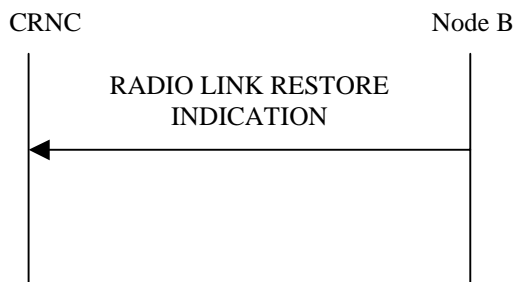


Figure 44: Radio Link Restoration procedure, Successful Operation

The Node B shall send the RADIO LINK RESTORE INDICATION message to the CRNC when indicated by the UL synchronisation detection algorithm defined in ref. [10] and [21]. [FDD – The algorithm in ref. [10] shall use the minimum value of the parameters N_INSYNC_IND that are configured in the cells supporting the radio links of the RL Set.] **The message shall use the Communication Control Port assigned to the concerned Node B Communication Context.**

[TDD – If the re-established Uu synchronisation concerns one or more individual Radio Links, the Node B shall indicate the affected Radio Link(s) using the *RL Information IE*.] [TDD – If the re-established Uu synchronisation concerns one or more individual CCTrCHs within a radio link, the Node B shall indicate the affected CCTrCHs using the *CCTrCH ID IE*.] [FDD – If the re-established Uu synchronisation concerns one or more Radio Link Sets, the Node B shall indicate the affected Radio Link Set(s) using the *RL Set Information IE*.]

8.3.13.3 Abnormal Condition

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8.3.14 Compressed Mode Command [FDD]

8.3.14.1 General

The Compressed Mode Command procedure is used to activate or deactivate the compressed mode in the Node B for one **Node B Communication Context**~~UE-UTRAN connection~~.

The Compressed Mode Command procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.14.2 Successful Operation



Figure 47: Compressed Mode Command procedure, Successful Operation

The procedure is initiated by the CRNC sending a COMPRESSED MODE COMMAND message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

The Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the *CM Configuration Change CFN IE* requested by the CRNC when receiving the COMPRESSED MODE COMMAND message from the CRNC. From that moment on, all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status IE* repetitions (if present) shall be started when the indicated *TGCFN IE* elapses. The *CM Configuration Change CFN IE* in the *Active Pattern Sequence Information IE* and *TGCFN IE* for each sequence refer to the next coming CFN with that value.

If the values of the *CM Configuration Change CFN-IE* and the *TGCFN IE* are equal, the concerned *Transmission Gap Pattern Sequence* shall be started immediately at the CFN with a value equal to the value received in the *CM Configuration Change CFN IE*.

8.3.14.3 Abnormal Conditions

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8.3.15 Downlink Power Timeslot Control [TDD]

8.3.15.1 General

The purpose of this procedure is to enable the Node B to use the indicated DL Timeslot ISCP values when deciding the DL TX Power for each timeslot.

The Downlink Power Timeslot Control procedure can be initiated by the CRNC at any time when the Node B *Ce*communication *Ce*ontext exists, irrespective of other ongoing CRNC initiated dedicated NBAP procedures towards this Node B *Ce*communication *Ce*ontext. The only exception occurs when the CRNC has requested the deletion of the last RL via this Node B, in which case the Downlink Power Timeslot Control procedure shall no longer be initiated.

8.3.15.2 Successful Operation



Figure 47A: Downlink Power Timeslot Control procedure, Successful Operation

The procedure is initiated by the CRNC sending a DL POWER TIMESLOT CONTROL REQUEST message to the Node B **using the Communication Control Port assigned to the concerned Node B Communication Context.**

Upon reception, the Node B shall use the indicated DL Timeslot ISCP value when deciding the DL TX Power for each timeslot as specified in ref. [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged.

8.3.15.3 Abnormal Conditions

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8.3.16 Radio Link Pre-emption

8.3.16.1 General

This procedure is started by the Node B when resources need to be freed.

The Node B may initiate the Radio Link Pre-emption procedure at any time after establishing a Radio Link.

8.3.16.2 Successful Operation

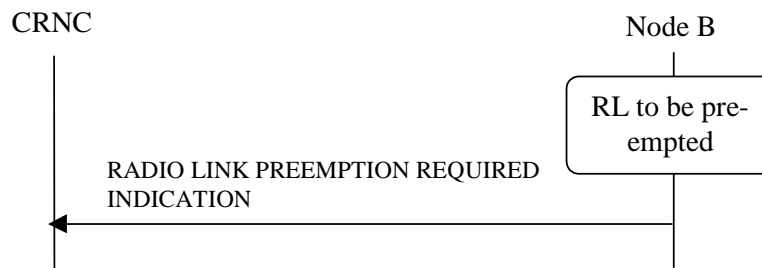


Figure 47B: Radio Link Pre-emption procedure, Successful Operation

When the Node B detects that one or more Radio Links should be pre-empted, (see Annex A), it shall send the RADIO LINK PREEMPTION REQUIRED INDICATION message to the CRNC using the Communication Control Port assigned to the concerned Node B Communication Context.

If all Radio Links for a CRNC Communication Context ID should be pre-empted, the *RL Information IE* shall be omitted. If one or several but not all Radio Links should be pre-empted for a CRNC Communication Context, the Radio Links that should be pre-empted shall be indicated in the *RL Information IE*. The Radio Link(s) that should be pre-empted should be deleted by the CRNC.

8.3.16.3 Abnormal Conditions

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8.4 Error Handling Procedures

8.4.1 Error Indication

8.4.1.1 General

The Error Indication procedure is initiated by a node in order to report detected errors in one incoming message, provided they cannot be reported by an appropriate response message.

8.4.1.2 Successful Operation

When the conditions defined in subclause 10 are fulfilled, the Error Indication procedure is initiated by an ERROR INDICATION message sent from the receiving node.

When the ERROR INDICATION message is sent from a Node B to its CRNC, the *CRNC Communication Context ID IE* shall be included in the message if available. When the ERROR INDICATION message is sent from a CRNC to a Node B, the *Node B Communication Context ID IE* shall be included in the message if available.

When a message for a dedicated procedure is received in the Node B with an invalid *Node B Communication Context ID IE*, the Node B shall include the unknown *Node B Communication Context ID IE* from the received message in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

When a message for a dedicated procedure is received in the CRNC with an invalid *CRNC Communication Context ID IE*, the CRNC shall include the unknown *CRNC Communication Context ID IE* from the received message in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

The ERROR INDICATION message shall include either the *Cause IE*, or the *Criticality Diagnostics IE*, or both the *Cause IE* and the *Criticality Diagnostics IE*.

Typical cause values for the ERROR INDICATION message are:

Protocol Causes:

- Transfer Syntax Error

- Abstract Syntax Error (Reject)
- Abstract Syntax Error (Ignore and Notify)
- Message not Compatible with Receiver State
- Unspecified

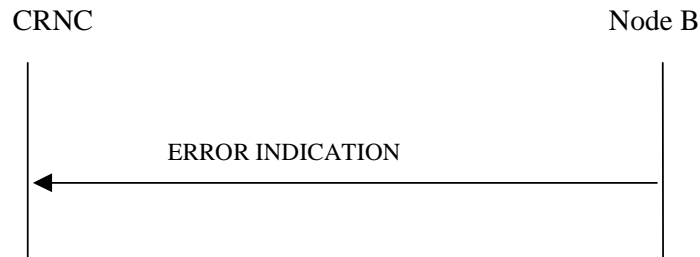


Figure 49: Error Indication procedure (Node B to CRNC): Successful Operation

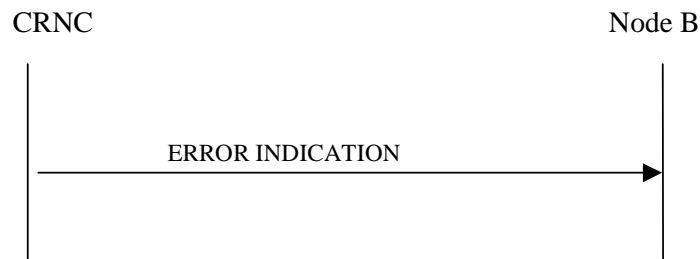


Figure 50: Error Indication procedure (CRNC to Node B), Successful Operation

8.4.1.3 Abnormal Conditions

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9 Elements for NBAP communication

9.1 Message Functional Definition and Contents

9.1.1 General

Subclause 9.1 presents the contents of NBAP messages in tabular format. The corresponding ASN.1 definition is presented in subclause 9.3. In case there is contradiction between the tabular format in subclause 9.1 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional IEs, where the tabular format shall take precedence.

NOTE: The messages have been defined in accordance to the guidelines specified in ref. [26].

9.1.2 Message Contents

9.1.2.1 Presence

An information element can be of the following types:

M	IEs marked as Mandatory (M) shall always be included in the message.
O	IEs marked as Optional (O) may or may not be included in the message.
C	IEs marked as Conditional (C) shall be included in a message only if the condition is satisfied. Otherwise the IE shall not be included.

In case of an **I**information **E**lement group, the group is preceded by a name for the info group (in bold). It is also indicated how many times a group may be repeated in the message and whether the group is conditional. The presence field of the **i**Information **e**lements inside one group defines if the **I**information **E**lement is mandatory, optional or conditional ~~if the group is present.~~ if the group is present.

9.1.2.2 Criticality

Each **I**information **E**lement or Group of **i**Information **e**lements may have a criticality information applied to it. Following cases are possible:

-	No criticality information is applied explicitly.
YES	Criticality information is applied. 'YES' is usable only for non-repeatable information elements.
GLOBAL	The information element and all its repetitions together have one common criticality information. 'GLOBAL' is usable only for repeatable information elements.
EACH	Each repetition of the information element has its own criticality information. It is not allowed to assign different criticality values to the repetitions. 'EACH' is usable only for repeatable information elements.

9.1.2.3 Range

The Range column indicates the allowed number of copies of repetitive IEs/~~AE~~.

9.1.2.4 Assigned Criticality

This column provides the actual criticality information as defined in subclause 10.3.2, if applicable.

9.1.3 —COMMON TRANSPORT CHANNEL SETUP REQUEST

9.1.3.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
CHOICE <i>Common Physical Channel To Be Configured</i>	M				YES	ignore
>Secondary CCPCH					–	
>>Secondary CCPCH		1				
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>FDD SCCPCH Offset	M		9.2.2.15	Corresponds to [7]: S-CCPCH,k	–	
>>>DL Scrambling Code	C-PCH		9.2.2.13		–	
>>>FDD DL Channelisation Code Number	M		9.2.2.14		–	
>>>TFCS	M		9.2.1.58	For the DL.	–	
>>>Secondary CCPCH Slot Format	M		9.2.2.43		–	
>>>TFCI Presence	C ₁ SlotFormat		9.2.1.57	Refer to TS [7]	–	
>>>Multiplexing Position	M		9.2.2.23		–	
>>>Power Offset Information		41			–	
>>>>PO1	M		Power Offset 9.2.2.29	Power offset for the TFCI bits	–	
>>>>PO3	M		Power Offset 9.2.2.29	Power offset for the pilot bits	–	
>>>STTD Indicator	M		9.2.2.48		–	
>>>FACH Parameters		0..<maxno ofFACHs>			GLOBAL	reject
>>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>>Transport Format Set	M		9.2.1.59	For the DL.	–	
>>>>ToAWS	M		9.2.1.61		–	
>>>>ToAWE	M		9.2.1.60		–	
>>>>Max FACH Power	M		DL Power 9.2.1.21	Maximum allowed power on the FACH.	–	
>>>PCH Parameters		0..1			YES	reject
>>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>>Transport Format Set	M		9.2.1.59	For the DL.	–	
>>>>ToAWS	M		9.2.1.61		–	
>>>>ToAWE	M		9.2.1.60		–	

>>>>PCH Power	M		DL Power 9.2.1.21		-	
>>>>PICH Parameters		1			-	
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>FDD DL Channelisation Code Number	M		9.2.2.14		-	
>>>>PICH Power	M		9.2.1.49A		-	
>>>>PICH Mode	M		9.2.2.26	Number of PI per frame	-	
>>>>STTD Indicator	M		9.2.2.48		-	
>PRACH					-	
>>PRACH		1				
>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>Scrambling Code Number	M		9.2.2.42		-	
>>>TFCS	M		9.2.1.58	For the UL.	-	
>>>Preamble Signatures	M		9.2.2.31		-	
>>>Allowed Slot Format Information		1..m_{Max} noofSlotFormatsPRA CH>			-	
>>>>RACH Slot Format	M		9.2.2.37		-	
>>>RACH Sub Channel Numbers	M		9.2.2.38		-	
>>>Puncture Limit	M		9.2.1.50	For the UL	-	
>>>Preamble Threshold	M		9.2.2.32		-	
>>>RACH Parameters		1			YES	Rreject
>>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>>Transport Format Set	M		9.2.1.59	For the UL.	-	
>>>AICH Parameters		1			-	
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>AICH Transmission Timing	M		9.2.2.1		-	
>>>>FDD DL Channelisation Code Number	M		9.2.2.14		-	
>>>>AICH Power	M		9.2.2.D		-	
>>>>STTD Indicator	M		9.2.2.48		-	
>PCPCHes					-	
>>CPCH Parameters		1			-	
>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>Transport Format Set	M		9.2.1.59	For the UL.	-	
>>>AP Preamble Scrambling Code	M		CPCH Scrambling Code Number		-	

			9.2.2.4B			
>>>CD Preamble Scrambling Code	M		CPCH Scrambling Code Number 9.2.2.4B		–	
>>>TFCS	M		9.2.1.58	For the UL	–	
>>>CD Signatures	O		Preamble Signatures 9.2.2.31	Note: When not present, all CD signatures are to be used.	–	
>>>CD Sub Channel Numbers			9.2.2.1C		–	
>>>Puncture Limit	M		9.2.1.50	For the UL	–	
>>>CPCH UL DPCCH Slot Format	M		9.2.2.4C	For UL CPCH message control part	–	
>>>UL SIR	M		UL SIR 9.2.2.58		–	
>>>Initial DL Transmission Power	M		DL Power 9.2.1.21		–	
>>>Maximum DL Power	M		DL Power 9.2.1.21		–	
>>>Minimum DL Power	M		DL Power 9.2.1.21		–	
>>>PO2	M		Power Offset 9.2.2.29	Power offset for the TPC bits relative to the pilot bits.	–	
>>>FDD TPC DL Step Size	M		9.2.2.16		–	
>>>N_Start_Message	M		9.2.2.23C		–	
>>>N_EOT	M		9.2.2.23A		–	
>>>Channel Assignment Indication	M		9.2.2.1D		–	
>>>CPCH Allowed Total Rate	M		9.2.2.4A		–	
>>>PCPCH Channel Information		1..<maxno ofPCPCHs >			–	
>>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>>CPCH Scrambling Code Number	M		9.2.2.4B	For UL PCPCH	–	
>>>>DL Scrambling Code	M		9.2.2.13	For DL CPCH message part	–	
>>>>FDD DL Channelisation Code Number	M		9.2.2.14	For DL CPCH message part	–	
>>>>PCP Length	M		9.2.2.24A		–	
>>>>UCSM Information	C-NCA	1			–	
>>>>>Min UL Channelisation Code Length	M		9.2.2.22		–	
>>>>>NF_max	M		9.2.2.23B		–	
>>>>>Channel		0..<maxA			–	

Request Parameters		<i>PSigNum</i> >				
>>>>>AP Preamble Signature	M		9.2.2.1A		–	
>>>>>AP Sub Channel Number	O		9.2.2.1B		–	
>>>VCAM Mapping Information	C-CA	<i>1..<maxno ofLen></i>		Refer to TS [18]	–	
>>>>Min UL Channelisation Code Length	M		9.2.2.22		–	
>>>>NF_max	M		9.2.2.23B		–	
>>>>Max Number of PCPCHes	M		9.2.2.20A		–	
>>>>SF Request Parameters		<i>1..<maxA PSigNum></i>			–	
>>>>>AP Preamble Signature	M		9.2.2.1A		–	
>>>>>AP Sub Channel Number	O		9.2.2.1B		–	
>>>AP-AICH Parameters		<i>1</i>			–	
>>>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>>>FDD DL Channelisation Code Number	M		9.2.2.14		–	
>>>>>AP-AICH Power	M		AICH Power 9.2.2.D		–	
>>>>>CSICH Power	M		AICH Power 9.2.2.D	For CSICH bits at end of AP-AICH slot	–	
>>>>>STTD Indicator	M		9.2.2.48		–	
>>>CD/CA-ICH Parameters		<i>1</i>			–	
>>>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>>>FDD DL Channelisation Code Number	M		9.2.2.14		–	
>>>>>CD/CA-ICH Power	M		AICH Power 9.2.2.D		–	
>>>>>STTD Indicator	M		9.2.2.48		–	

Condition	Explanation
SlotFormat	The IE shall be present if the <i>Secondary CCPCH Slot Format</i> IE is set to any of the values from 8 to 17.
CA	The IE shall be present if the <i>Channel Assignment Indication</i> IE is set to "CA Active".
NCA	The IE shall be present if the <i>Channel Assignment Indication</i> IE is set to "CA Inactive".
PCH	The IE shall be present if the <i>PCH pParameters</i> IE is not present.

Range bBound	Explanation
<i>mMaxnoofFACHs</i>	Maximum number of FACHs that can be defined on a Secondary CCPCH.
<i>mMaxnoofPCCHs</i>	Maximum number of PCCHs for a CPCH
<i>mMaxnoofLen</i>	Maximum number of Min UL Channelisation Code Length
<i>mMaxnoofSlotFormatsPRACH</i>	Maximum number of SF for a PRACH
<i>mMaxAPSigNum</i>	Maximum number of AP Signatures.

9.1.3.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
CHOICE <i>Common Physical Channel To Be Configured</i>	M				YES	ignore
>>>Secondary CCPCHs					–	
>>>SCCPCH CCTrCH ID	M		CCTrCH ID 9.2.3.3	For DL CCTrCH supporting one or several Secondary CCPCHs	–	
>>>TFCS	M		9.2.1.58	For DL CCTrCH supporting one or several Secondary CCPCHs	–	
>>>TFCI Coding	M		9.2.3.22		–	
>>>Puncture Limit	M		9.2.1.50		–	
>>>Secondary CCPCH		1..<maxno ofSCCPCHs>			GLOBAL	reject
>>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>>TDD Channelisation Code	M		9.2.3.19		–	
>>>>Time Slot	M		9.2.3.23		–	
>>>>Midamble Shift and Burst Type	M		9.2.3.7		–	
>>>>TDD Physical Channel Offset	M		9.2.3.20		–	
>>>>Repetition Period	M		9.2.3.16		–	
>>>>Repetition Length	M		9.2.3.15		–	
>>>>SCCPCH Power	M		DL Power 9.2.1.21		–	
>>>>FACH		0..<maxno ofFACHs>			GLOBAL	reject
>>>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>>>FACH CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
>>>>>Transport Format Set	M		9.2.1.59	For the DL.	–	
>>>>>ToAWS	M		9.2.1.61		–	
>>>>>ToAWE	M		9.2.1.60		–	
>>>>>PCH		0..1			YES	reject
>>>>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>>>>PCH CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	

>>>Transport Format Set	M		9.2.1.59	For the DL.	-	
>>>ToAWS	M		9.2.1.61		-	
>>>ToAWE	M		9.2.1.60		-	
>>>>PICH Parameters		1			YES	reject
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>>>>Time Slot	M		9.2.3.23		-	
>>>>Midamble Shift and Burst Type	M		9.2.3.7		-	
>>>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>>>Repetition Period	M		9.2.3.16		-	
>>>>Repetition Length	M		9.2.3.15		-	
>>>>Paging Indicator Length	M		9.2.3.8		-	
>>>>PICH Power	M		9.2.1.49A		-	
>>>PRACH					-	
>>>>PRACH	M	1			YES	reject
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>TFCS	M		9.2.1.58		-	
>>>>Time Slot	M		9.2.3.23		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>>>>Max PRACH Midamble Shifts	M		9.2.3.6		-	
>>>>PRACH Midamble	M		9.2.3.14		-	
>>>>>RACH		1			YES	reject
>>>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>>>Transport Format Set	M		9.2.1.59	For the UL	-	

Range Bound	Explanation
m MaxnoofSCCPCHs	Maximum number of Secondary CCPCHs per CCTrCH.
m MaxnoofCCTrCHs	Maximum number of CCTrCHs that can be defined in a cell.
m MaxnoofFACHs	Maximum number of FACHs that can be defined on a Secondary CCPCH.

9.1.4 COMMON TRANSPORT CHANNEL SETUP RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
FACH Parameters Info		<i>0..<maxno ofFACHs></i>		The FACH Parameters may be combined with PCH Parameters	GLOBAL	ignore
>FACH Parameters	M		Common Transport Channel Information Response 9.2.1.14A		–	
PCH Parameters	O		Common Transport Channel Information Response 9.2.1.14A	The PCH Parameters may be combined with FACH Parameters	YES	ignore
RACH Parameters	O		Common Transport Channel Information Response 9.2.1.14A	The RACH Parameters shall not be combined with FACH Parameters or PCH Parameters	YES	ignore
CPCH Parameters	O		Common Transport Channel Information Response 9.2.1.14A	The CPCH Parameters shall not be combined with FACH Parameters or PCH Parameters or RACH Parameters	YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
<i>mMaxnoofFACHs</i>	Maximum number of FACHs that can be defined on a Secondary CCPCH[FDD] / a group of Secondary CCPCHs [TDD].

9.1.5 COMMON TRANSPORT CHANNEL SETUP FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	–
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	–
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.6 COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST

9.1.6.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
CHOICE <i>Common Physical Channel To Be Configured</i>	M				YES	reject
>>Secondary CCPCH					–	
>>FACH Parameters		0..<maxFACHCell>			GLOBAL	reject
>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>Max FACH Power	O		DL Power 9.2.1.21	Maximum allowed power on the FACH.	–	
>>>ToAWS	O		9.2.1.61		–	
>>>ToAWE	O		9.2.1.60		–	
>>PCH Parameters		0..1			YES	reject
>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>PCH Power	O		DL Power 9.2.1.21	Power to be used on the PCH.	–	
>>>ToAWS	O		9.2.1.61		–	
>>>ToAWE	O		9.2.1.60		–	
>>PICH Parameters		0..1			YES	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>PICH Power	O		9.2.1.49A		–	
>PRACH					–	
>>PRACH Parameters		0..<maxPRACHCell>			GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>Preamble Signatures	O		9.2.2.31		–	
>>>Allowed Slot Format Information		0..<maxPRACHCell>			–	
>>>>RACH Slot Format	M		9.2.2.37		–	
>>>>RACH Sub Channel Numbers	O		9.2.2.38		–	
>>AICH Parameters		0..<maxPRACHCell>			GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	

>>>AICH Power	O		9.2.2.D		–	
>CPCH					–	
>>CPCH Parameters		0..<maxno ofCPCHs>			GLOBAL	reject
>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>UL SIR	O		9.2.2.58		–	
>>>Initial DL Transmission Power	O		DL Power 9.2.1.21		–	
>>>Maximum DL Power	O		DL Power 9.2.1.21		–	
>>>Minimum DL Power	O		DL Power 9.2.1.21		–	
>>AP-AICH Parameters		0..<maxno ofCPCHs>			GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>AP-AICH Power	O		AICH Power 9.2.2.D		–	
>>>CSICH Power	O		AICH Power 9.2.2.D	For CSICH bits at end of AP-AICH slot	–	
>>CD/CA-ICH Parameters		0..<maxno ofCPCHs>			GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>CD/CA-ICH Power	O		AICH Power 9.2.2.D		–	

Range bBound	Explanation
MaxFACHCell maxFACHCell	Maximum number of FACHs that can be defined in a Cell
MaxnoofCPCHs maxnoofCPCHs	Maximum number of CPCHs that can be defined in a Cell
MaxPRACHCell maxPRACHCell	Maximum number of PRACHs and AICHse that can be defined in a Cell
MaxnoofSlotFormatsPRACH maxnoofSlotFormatsPRACH	Maximum number of SF for a PRACH

9.1.6.2 TDD Message

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Secondary CCPCH Parameters		0..10.1			YES	reject

>CCTrCH ID	M		9.2.3.3	For DL CCTrCH supporting one or several Secondary CCPCHs	–	
>Secondary CCPCHs to be configured		$0..<maxno\ of\ SCCPCHs>0..<Maxnoof\ SCCPCHs>$			GLOBAL	reject
>>Common Physical Channel ID	M		9.2.1.13		–	
>>SCCPCH Power	O		DL power 9.2.1.21		–	
PICH Parameters		$0..10..1$			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>PICH Power	O		9.2.1.49A		–	
FACH Parameters		$0..<mMax\ noof\ FACHs>$			GLOBAL	reject
>Common Transport Channel ID	M		9.2.1.14		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	
PCH Parameters		$0..10..4$			YES	reject
>Common Transport Channel ID	M		9.2.1.14		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	

Range bBound	Explanation
$Maxnoof\ SCCPCHs\ maxnoof\ SCCPCHs$	Maximum number of SCCPCHs that can be repeated in a Cell
$Maxnoof\ FACH\ maxnoof\ FACH$	Maximum number of FACHs that can be repeated in a Cell

9.1.7 COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.8 COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.9 COMMON TRANSPORT CHANNEL DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Common Physical Channel ID	M		9.2.1.13	Indicates the Common Physical Channel for which the Common Transport Channels (together with the Common Physical Channel) shall be deleted.	YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject

9.1.10 COMMON TRANSPORT CHANNEL DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.11 BLOCK RESOURCE REQUEST

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Blocking Priority Indicator	M		9.2.1.5		YES	reject
Shutdown Timer	C- BlockNormal alBlockNormal		9.2.1.56		YES	reject

Condition	Explanation
BlockNormal	The IE shall be present if the <i>Blocking Priority Indicator</i> IE indicates "Normal Priority".

9.1.12 BLOCK RESOURCE RESPONSE

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.13 BLOCK RESOURCE FAILURE

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.14 UNBLOCK RESOURCE INDICATION

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	ignore

9.1.15 AUDIT REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	

9.1.16 AUDIT REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Start Of Audit Sequence Indicator	M		9.2.1.56B		YES	reject

9.1.17 AUDIT RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
End Of Audit Sequence Indicator	M		9.2.1.29A		YES	ignore
Cell Information		0.. <maxCells inNodeB> ><maxCells inNodeB>			EACH	ignore
>C-ID	M		9.2.1.9		–	
>Configuration Generation ID	M		9.2.1.16		–	
>Resource Operational State	M		9.2.1.52		–	
>Availability Status	M		9.2.1.2		–	
>Local Cell ID	M		9.2.1.38	The local cell that the cell is configured on	–	
>Primary SCH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>Secondary SCH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>Primary CPICH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>Secondary CPICH Information		0..<maxSecondaryCPICHCells>			EACH	ignore
>>Secondary CPICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>Primary CCPCH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>BCH Information	O		Common Transport Channel Status		YES	ignore

			Information 9.2.1.13A4 B			
>Secondary CCPCH Information		$0..<maxS\ CCPCHCell>$			EACH	ignore
>>Secondary CCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>PCH Information	O		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>PICH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>FACH Information		$0..<maxFA\ CHCell>$			EACH	ignore
>>FACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>PRACH Information		$0..<maxP\ RACHCell>$			EACH	ignore
>>PRACH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>RACH Information		$0..<maxR\ ACHCell>$			EACH	ignore
>>RACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>AICH Information		$0..<maxP\ RACHCell>$			EACH	ignore
>>AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>PCPCH Information		$0..<maxP\ CPCHCell>$			EACH	ignore

		>				
>>PCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>CPCH Information		0..<maxCPCHCell>			EACH	ignore
>>CPCH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>AP-AICH Information		0..<maxCPCHCell>			EACH	ignore
>>AP-AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>CD/CA-ICH Information		0..<maxCPCHCell>			EACH	ignore
>>CD/CA-ICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>SCH Information	O		Common Physical Channel Status Information 9.2.1.13A	TDD Sync Channel	YES	ignore
Communication Control Port Information		0..<maxCCPi nNodeB>			EACH	ignore
>Communication Control Port ID	M		9.2.1.15		–	
>Resource Operational State	M		9.2.1.52		–	
>Availability Status	M		9.2.1.2		–	
Local Cell Information		0..<maxLocalCellinNodeB>			EACH	ignore
>Local Cell ID	M		9.2.1.38		–	
>DL or Global Capacity Credit	M		9.2.1.20B		–	
>UL Capacity Credit	O		9.2.1.65A		–	
>Common Channels Capacity Consumption Law	M		9.2.1.9A		–	
>Dedicated Channels Capacity Consumption Law	M		9.2.1.20A		–	
>Maximum DL Power Capability	O		9.2.1.39		–	
>Minimum Spreading	O		9.2.1.47		–	

Factor						
>Minimum DL Power Capability	O		9.2.1.46A		-	
>Local Cell Group ID	O		9.2.1.37A		-	
Local Cell Group Information		0.. <maxLocalCellinNodeB>			EACH	ignore
>Local Cell Group ID	M		9.2.1.37A		-	
>DL or Global Capacity Credit	M		9.2.1.20B		-	
>UL Capacity Credit	O		9.2.1.65A		-	
>Common Channels Capacity Consumption Law	M		9.2.1.9A		-	
>Dedicated Channels Capacity Consumption Law	M		9.2.1.20A		-	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range bBound	Explanation
MaxCellinNodeBmaxCellinNodeB	Maximum number of Cells that can be configured in Node B
MaxCCPinNodeBmaxCCPinNodeB	Maximum number of Communication Control Ports that can exist in the Node B
MaxCPCHCellmaxCPCHCell	Maximum number of CPCHes that can be defined in a Cell
MaxLocalCellinNodeBmaxLocalCellinNodeB	Maximum number of Local Cells that can exist in the Node B
MaxPCPCHCellmaxPCPCHCell	Maximum number of PCPCHes that can be defined in a Cell
MaxSCPICHCellmaxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.
MaxSCCPCHCellmaxSCCPCHCell	Maximum number of Secondary CCPCHs that can be defined in a Cell.
MaxFACHCellmaxFACHCell	Maximum number of FACHes that can be defined in a Cell
MaxPRACHCellmaxPRACHCell	Maximum number of PRACHes that can be defined in a Cell
MaxRACHCellmaxRACHCell	Maximum number of RACHes that can be defined in a Cell

9.1.17A AUDIT FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
Cause	M		9.2.1.6		YES	ignore
Criticality diagnostics	O		9.2.1.17		YES	ignore

9.1.18 COMMON MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	reject
Common Measurement Object Type	M		9.2.1.10		YES	reject
CHOICE Common-Common Measurement Object Type	M				YES	reject
>>Cell					–	
>>C-ID	M		9.2.1.9		–	
>>Time Slot	O		9.2.3.23	TDD only	–	
>>RACH				FDD only	–	
>>C-ID	M		9.2.1.9		–	
>>Common Transport Channel ID	M		9.2.1.14		–	
>>CPCH				FDD only	–	
>>C-ID	M		9.2.1.9		–	
>>Common Transport Channel ID	M		9.2.1.14		–	
>>Spreading Factor	O		Minimum UL Channelisation Code Length 9.2.2.22		–	
Common Measurement Type	M		9.2.1.11		YES	reject
Measurement Filter Coefficient	O		9.2.1.41		YES	reject
Report Characteristics	M		9.2.1.51		YES	reject
SFN r Reporting i ndicator	M		FN r Reporting i ndicator 9.2.1.29B		YES	reject
SFN	O		9.2.1.53A		YES	reject

9.1.19 COMMON MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE Common-Common Measurement Object Type	O			Common Measurement Object Type that the measurement was initiated with.	YES	ignore
>>Cell					YES	
>>Common Measurement Value	M		9.2.1.12		–	
>>RACH				FDD only	–	
>>Common Measurement Value	M		9.2.1.12		–	
>>CPCH				FDD only	–	
>>Common Measurement Value	M		9.2.1.12		–	
SFN	O		9.2.1.53A	Common Measurement Time Reference	YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.20 COMMON MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.21 COMMON MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE Common-Common Measurement Object Type	M			Common Measurement Object Type that the measurement was initiated with.	YES	ignore
<i>>>Cell</i>					–	
<i>>>Common Measurement Value Information</i>	M		9.2.1.12A		–	
<i>>>RACH</i>				FDD only	–	
<i>>>Common Measurement Value Information</i>	M		9.2.1.12A		–	
<i>>>CPCH</i>				FDD only	–	
<i>>>Common Measurement Value Information</i>	M		9.2.1.12A			
SFN	O		9.2.1.53A	Common Measurement Time Reference	YES	ignore

9.1.22 COMMON MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore

9.1.23 COMMON MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore

9.1.24 CELL SETUP REQUEST

9.1.24.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Local Cell ID	M		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
T Cell	M		9.2.2.49		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nu [14]	YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nd [14]	YES	reject

Maximum Transmission Power	M		9.2.1.40		YES	reject
Closed Loop Timing Adjustment Mode	O		9.2.2.2A		YES	reject
Primary Scrambling Code	M		9.2.2.34		YES	reject
Synchronisation Configuration		41			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		-	
>N_OUTSYNC_IND	M		9.2.1.47B		-	
>T_RLFAILURE	M		9.2.1.56A		-	
DL TPC P _{pattern 01} C _{count}	M		9.2.2.13A		YES	reject
Primary SCH Information		41			YES	reject
>Common Physical Channel ID	M		9.2.1.13		-	
>Primary SCH Power	M		DL Power 9.2.1.21		-	
>TSTD Indicator	M		9.2.1.64		-	
Secondary SCH Information		41			YES	reject
>Common Physical Channel ID	M		9.2.1.13		-	
>Secondary SCH P _{power}	M		DL Power 9.2.1.21		-	
>TSTD Indicator	M		9.2.1.64		-	
Primary CPICH Information		41			YES	reject
>Common Physical Channel ID	M		9.2.1.13		-	
>Primary CPICH P _{power}	M		9.2.2.33		-	
>Transmit Diversity Indicator	M		9.2.2.53		-	
Secondary CPICH Information		0..<maxS CPICHCell >0..<maxS CPICHCell ≥			EACH	reject
>Common Physical Channel ID	M		9.2.1.13		-	
>DL Scrambling C _{code}	M		9.2.2.13		-	
>FDD DL Channelisation Code Number	M		9.2.2.14		-	
>Secondary CPICH Power	M		DL Power 9.2.1.21		-	
>Transmit Diversity Indicator	M		9.2.2.53		-	
Primary CCPCH Information		41			YES	reject
>Common Physical Channel ID	M		9.2.1.13		-	
>>BCH Information		41			-	
>>Common Transport Channel ID	M		9.2.1.14		-	
>>BCH Power	M		DL Power 9.2.1.21		-	
>STTD Indicator	M		9.2.2.48		-	
Limited P_{power} I_{increase} I_{information}		41			YES	reject
>Power_Raise_Limit	M		9.2.2.29A		-	
>DL_power_averaging_win_dow_size	M		9.2.2.12A		-	

Range bBound	Explanation
MaxSCPICHCell,maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.

9.1.24.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Local Cell ID	M		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation Id	M		9.2.1.16		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nt [15]	YES	reject
Cell Parameter ID	M		9.2.3.4		YES	reject
Maximum Transmission Power	M		9.2.1.40		YES	reject
Transmission Diversity Applied	M		9.2.3.26	On DCHs	YES	reject
Sync Case	M		9.2.3.18		YES	reject
Synchronisation Configuration		41			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		–	
>N_OUTSYNC_IND	M		9.2.1.47B		–	
>T_RLFAILURE	M		9.2.1.56A		–	
DPCH Constant Value	M		Constant Value		YES	reject
PUSCH Constant Value	M		Constant Value		YES	reject
PRACH Constant Value	M		Constant Value		YES	reject
Timing Advance Applied	M		9.2.3.22A		YES	reject
SCH Information		41			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>CHOICE Sync Case	M				YES	reject
>>>>Case 1					–	
>>>Time Slot	M		9.2.3.23		–	
>>>>Case 2					–	
>>>SCH Time Slot	M		9.2.3.17		–	
>SCH Power	M		DL Power 9.2.1.21		–	
>TSTD Indicator	M		9.2.1.64		–	
PCCPCH Information		41			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>TDD Physical Channel Offset	M		9.2.3.20		–	
>Repetition Period	M		9.2.3.16		–	
>Repetition Length	M		9.2.3.15		–	
>PCCPCH Power	M		9.2.3.9		–	
>SCTD Indicator	M		9.2.3.30		–	
Time Slot Configuration		4... 151..15			GLOBAL	reject
>Time Slot	M		9.2.3.23		–	
>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	

9.1.25 CELL SETUP RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.26 CELL SETUP FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.27 CELL RECONFIGURATION REQUEST

9.1.27.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Maximum Transmission Power	O		9.2.1.40		YES	reject
Synchronisation Configuration		0,1,0,1			YES	reject
>N_INSYNCR_IND	M		9.2.1.47A		–	
>N_OUTSYNCR_IND	M		9.2.1.47B		–	
>T_RLFFAILURE	M		9.2.1.56A		–	
Primary SCH Information		0,10,1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Primary SCH P _{power}	M		DL Power 9.2.1.21		–	
Secondary SCH Information		0,10,1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Secondary SCH P _{power}	M		DL Power 9.2.1.21		–	
Primary CPICH Information		0,10,1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Primary CPICH P _{power}	M		9.2.2.33		–	
Secondary CPICH Information		0..<maxS CPICHCell >0..<maxS CPICHCell ≥			YESEACH	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Secondary CPICH Power	M		DL Power 9.2.1.21		–	
Primary CCPCH Information		0,10,1			YES	reject
>>BCH Information		1,1			–	
>>Common Transport Channel ID	M		9.2.1.14		–	
>>BCH Power	M		DL Power 9.2.1.21		–	

Range bBound	Explanation
MaxSCPICHCell maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.

9.1.27.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Synchronisation Configuration		0..10,1			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		–	
>N_OUTSYNC_IND	M		9.2.1.47B		–	
>T_RLFAILURE	M		9.2.1.56A		–	
Timing Advance Applied	O		9.2.3.22A		YES	reject
SCH Information		0..10,1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>SCH Power	M		DL Power 9.2.1.21		–	
PCCPCH Information		0..10,1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>PCCPCH Power	M		9.2.3.9		–	
Maximum Transmission Power	O		9.2.1.40		YES	reject
DPCH Constant Value	O		Constant Value		YES	reject
PUSCH Constant Value	O		Constant Value		YES	reject
PRACH Constant Value	O		Constant Value		YES	reject
Time Slot Configuration		1..151..15			GLOBAL	reject
>Time Slot	M		9.2.3.23		–	
>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	

9.1.28 CELL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.29 CELL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.30 CELL DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject

9.1.31 CELL DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.32 RESOURCE STATUS INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Indication Type	M		9.2.1.36		YES	ignore
CHOICE <i>Indication Type</i>	M				YES	ignore
> <i>No Failure</i>					–	
>>Local Cell Information		1..<maxLocalCellinNodeB>			EACH	ignore
>>>Local Cell ID	M		9.2.1.38		–	
>>>Add/Delete Indicator	M		9.2.1.1		–	
>>>DL or Global Capacity Credit	C-add		9.2.1.20B		–	
>>>UL Capacity Credit	O		9.2.1.65A		–	
>>>Common Channels Capacity Consumption Law	C-add		9.2.1.9A		–	
>>>Dedicated Channels Capacity Consumption Law	C-add		9.2.1.20A		–	
>>>Maximum DL Power Capability	C-add		9.2.1.39		–	
>>>Minimum Spreading Factor	C-add		9.2.1.47		–	
>>>Minimum DL Power Capability	C-add		9.2.1.46A		–	
>>>Local Cell Group ID	O		9.2.1.37A		–	
>>>>Local Cell Group Information		0..<maxLocalCellinNodeB>			EACH	ignore
>>>>Local Cell Group ID	M		9.2.1.37A		–	
>>>>DL or Global Capacity Credit	M		9.2.1.20B		–	
>>>>UL Capacity Credit	O		9.2.1.65A		–	
>>>>Common Channels Capacity Consumption Law	M		9.2.1.9A		–	
>>>>Dedicated Channels Capacity Consumption Law	M		9.2.1.20A		–	
> <i>Service Impacting</i>					–	
>>Local Cell Information		0..<maxLocalCellinNodeB>			EACH	ignore
>>>>Local Cell ID	M		9.2.1.38		–	
>>>>DL or Global Capacity Credit	O		9.2.1.20B		–	
>>>>UL Capacity Credit	O		9.2.1.65A		–	
>>>>Common Channels Capacity Consumption Law	O		9.2.1.9A		–	
>>>>Dedicated Channels Capacity Consumption	O		9.2.1.20A		–	

Law						
>>>Maximum DL Power Capability	O		9.2.1.39		-	
>>>Minimum Spreading Factor	O		9.2.1.47		-	
>>>Minimum DL Power Capability	O		9.2.1.46A		-	
>>>>Local Cell Group Information		<i>0.. <maxLocal CellinNode B></i>			EACH	ignore
>>>Local Cell Group ID	M		9.2.1.37A		-	
>>>DL or Global Capacity Credit	O		9.2.1.20B		-	
>>>UL Capacity Credit	O		9.2.1.65A		-	
>>>Common Channels Capacity Consumption Law	O		9.2.1.9A		-	
>>>Dedicated Channels Capacity Consumption Law	O		9.2.1.20A		-	
>>Communication Control Port Information		<i>0.. <maxCCPi nNodeB></i>			EACH	ignore
>>>Communication Control Port ID	M		9.2.1.15		-	
>>>Resource Operational State	M		9.2.1.52		-	
>>>Availability Status	M		9.2.1.2		-	
>>Cell Information		<i>0.. <maxCelli nNodeB></i>			EACH	ignore
>>>C-ID	M		9.2.1.9		-	
>>>Resource Operational State	O		9.2.1.52		-	
>>>Availability Status	O		9.2.1.2		-	
>>>Primary SCH Information	O		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore
>>>Secondary SCH Information	O		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore
>>>Primary CPICH Information	O		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore
>>>>Secondary CPICH Information		<i>0..<maxS CPICHCell ></i>		FDD only	EACH	ignore
>>>>Secondary CPICH Individual Information	M		Common Physical Channel Status Information		-	

			9.2.1.13A			
>>>Primary CCPCH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>>>BCH Information	O		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>>>Secondary CCPCH Information		$0..<maxS\ CCPCHCell>$			EACH	ignore
>>>>Secondary CCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>PCH Information	O		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>>>PICH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>>>FACH Information		$0..<maxFACHCell>$			EACH	ignore
>>>>FACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>>>PRACH Information		$0..<maxPRACHCell>$			EACH	ignore
>>>>PRACH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>RACH Information		$0..<maxPRACHCell>$			EACH	ignore
>>>>RACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>>>AICH Information		$0..<maxPRACHCell>$		FDD only	EACH	ignore
>>>>AICH Individual Information	M		Common Physical Channel Status		–	

			Information 9.2.1.13A			
>>>PCPCH Information		<i>0..<maxP CPCHCell ></i>		FDD only	EACH	ignore
>>>>PCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>CPCH Information		<i>0.. <maxCPC HCell></i>		FDD only	EACH	ignore
>>>>CPCH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>>>AP-AICH Information		<i>0.. <maxCPC HCell></i>		FDD only	EACH	ignore
>>>>AP-AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>CD/CA-ICH Information		<i>0.. <maxCPC HCell></i>		FDD only	EACH	ignore
>>>>CD/CA-ICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>SCH Information	O		Common Physical Channel Status Information 9.2.1.13A	TDD only	YES	ignore
Cause	O		9.2.1.6		YES	ignore

Condition	Explanation
add	The IE shall be present if the <i>Add/Delete Indicator</i> IE is set to "Add".

Range b Bound	Explanation
<i>M</i> <u>maxLocalCellinNodeB</u>	Maximum number of Local Cells that can exist in the Node B
<i>M</i> <u>maxCellinNodeB</u>	Maximum number of <u>C-ID</u> s that can be configured in <u>the</u> Node B
<i>M</i> <u>maxCPCHCell</u>	Maximum number of CPCHes that can be defined in a Cell
<i>M</i> <u>maxSCPICHCell</u>	Maximum number of Secondary CPICHs that can be defined in a Cell.
<i>M</i> <u>maxSCCPCHCell</u>	Maximum number of Secondary CCPCHs that can be defined in a Cell.
<i>M</i> <u>maxFACHCell</u>	Maximum number of FACHes that can be defined in a Cell
<i>M</i> <u>maxPCPCHCell</u>	Maximum number of PCPCHes that can be defined in a Cell
<i>Max</i> <u>PRACHCell</u> <i>max</i> <u>PRACHCell</u>	Maximum number of PRACHes and AICHes that can be defined in a Cell
<i>M</i> <u>maxCCPinNodeB</u>	Maximum number of <u>C</u> ommunication <u>C</u> ontrol <u>P</u> ports that can exist in the Node B

9.1.33 SYSTEM INFORMATION UPDATE REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
BCCH Modification Time	O		9.2.1.3		YES	reject
MIB/SB/SIB Information		1.. <i><maxIB></i>			GLOBAL	reject
>IB Type	M		9.2.1.35		–	
>IB OC ID	M		9.2.1.31A	In one message, every occurrence of IB Type can only be deleted once and/or added once.	–	
>CHOICE <i>IB Deletion Indicator</i>	M				–	
>> <i>No Deletion</i>					–	
>>>SIB Originator	C-SIB		9.2.1.55		–	
>>>IB SG REP	O		9.2.1.34		–	
>>> Segment Information		1.. <i><maxIBSEG></i>			GLOBAL	reject
>>>>IB SG POS	O		9.2.1.33		–	
>>>>Segment Type	C- CRNCO rigin ation		9.2.1.53B		–	
>>>>IB SG DATA	C- CRNCO rigin ation		9.2.1.32		–	
>>>> <i>Deletion</i>			NULL		–	

Range Bound	Explanation
<i>maxIB</i>	Maximum number of information Blocks supported in one message.
<i>maxIBSEG</i>	Maximum number of segments for one Information Block

Condition	Explanation
CRNCO rigin ation	The IE shall be present if the <i>SIB Originator</i> IE is set to "CRNC" or if the <i>IB Type</i> IE is set to "MIB", "SB1" or "SB2".
SIB	The IE shall be present if the <i>IB Type</i> IE is set to "SIB".

9.1.34 SYSTEM INFORMATION UPDATE RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.35 SYSTEM INFORMATION UPDATE FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.36 RADIO LINK SETUP REQUEST

9.1.36.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL DPCH Information		1			YES	reject
>UL Scrambling Code	M		9.2.2.59		–	
>Min UL Channelisation Code Length	M		9.2.2.22		–	
>Max Number of UL DPDCHs	C-CodeLen		9.2.2.21		–	
>Puncture Limit	M		9.2.1.50	For UL	–	
>TFCS	M		9.2.1.58	For UL	–	
>UL DPCCH Slot Format	M		9.2.2.57		–	
>UL SIR Target	M		UL SIR 9.2.2.58		–	
>Diversity Mode	M		9.2.2.9		–	
>SSDT Cell ID Length	O		9.2.2.45		–	
>S Field Length	O		9.2.2.40		–	
DL DPCH Information		1			YES	reject
>TFCS	M		9.2.1.58	For DL	–	
>DL DPCH Slot Format	M		9.2.2.10		–	
>TFCI Signalling Mode	M		9.2.2.50		–	
>TFCI Presence	C-SlotFormat		9.2.1.57		–	
>Multiplexing Position	M		9.2.2.23		–	
>PDSCH RL ID	C-DSCH		RL ID 9.2.1.53		–	
>PDSCH Code Mapping	C-DSCH		9.2.2.25		–	
>Power Offset Information		1			–	
>>PO1	M		Power Offset 9.2.2.29	Power offset for the TFCI bits	–	
>>PO2	M		Power Offset 9.2.2.29	Power offset for the TPC bits	–	
>>PO3	M		Power Offset 9.2.2.29	Power offset for the pilot bits	–	
>FDD TPC DL Step Size	M		9.2.2.16		–	
>Limited Power Increase	M		9.2.2.18A		–	
>Inner Loop DL PC Status	M		9.2.2.18B		–	
DCH Information	M		DCH FDD Information 9.2.2.4D		YES	reject
DSCH Information	O		DSCH FDD Information 9.2.2.13B		YES	reject
TFCI2 bearer information		0..10..1			YES	ignore
>ToAWS	M		9.2.1.61		-	

>ToAWE	M		9.2.1.60		-	
RL Information		<i>1..<maxno ofRLs>+ to <maxno ofRLs></i>			EACH	notify
>RL ID	M		9.2.1.53		-	
>C-ID	M		9.2.1.9		-	
>First RLS Indicator	M		9.2.2.16A		-	
>Frame Offset	M		9.2.1.31		-	
>Chip Offset	M		9.2.2.2		-	
>Propagation Delay	O		9.2.2.35		-	
>Diversity Control Field	C ₁ NotFirstRL		9.2.1.25		-	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		-	
>Initial DL <i>T</i> transmission Power	M		DL Power 9.2.1.21	Initial power on DPCH	-	
>Maximum DL <i>P</i> power	M		DL Power 9.2.1.21	Maximum allowed power on DPCH	-	
>Minimum DL <i>P</i> power	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	-	
>SSDT Cell Identity	O		9.2.2.44		-	
>Transmit Diversity Indicator	C ₁ Diversity mode		9.2.2.53		-	
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject
Active Pattern Sequence Information	O		9.2.2.A		YES	reject

Condition	Explanation
CodeLen	The IE shall be present if <i>Min UL Channelisation Code Length</i> IE equals to 4.
NotFirstRL	The IE shall be present if the RL is not the first one in the <i>RL Information</i> IE.
DSCH	The IE shall be present if the <i>DSCH Information</i> IE is present.
SlotFormat	This IE is only present if the DL DPCH slot format is equal to any of the value 12 to 16.
Diversity mode	The IE shall be present if <i>Diversity Mode</i> IE in <i>UL DPCH Information</i> IE is not set to "none".

Range <i>b</i> Bound	Explanation
<i>Maxno ofRLs</i> <i>maxno ofRLs</i>	Maximum number of RLs for one UE.

9.1.36.2 TDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNCCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCTrCH Information		0..<maxno CCTrCH> 0 to <maxno CCTrCH>			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
>UL DPCH Information		0..10..1			YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
DL CCTrCH Information		0 to <maxno CCTrCH> 0..<maxno CCTrCH>			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
>TDD TPC DL Step Size	M		9.2.3.21			
>TPC CCTrCH List		0 to <maxno CCTrCH> 0..<maxno CCTrCH>		List of uplink CCTrCH which provide TPC	–	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
>DL DPCH information		0..10..1			YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
DCH Information	O		DCH TDD Information 9.2.3.4C		YES	reject
DSCH Information	O		DSCH TDD Information 9.2.3.5A		YES	reject
USCH Information	O		9.2.3.28		YES	reject
RL Information		14			YES	reject
>RL ID	M		9.2.1.53		–	
>C-ID	M		9.2.1.9		–	

>Frame Offset	M		9.2.1.31		-	
>Special Burst Scheduling	M		9.2.3.18A		-	
>Initial DL $P_{\text{transmission}}$ Power	M		DL Power 9.2.1.21	Initial power on DPCH	-	
>Maximum DL P_{power}	M		DL Power 9.2.1.21	Maximum allowed power on DPCH	-	
>Minimum DL P_{power}	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	-	
>DL Time Slot ISCP Info	O		9.2.3.4F		-	

Range α Bound	Explanation
$\max_{\text{noCCTrCH}} \alpha, \max_{\text{noCCTrCH}}$	Number of CCTrCHs for one UE.

9.1.37 RADIO LINK SETUP RESPONSE

9.1.37.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All-NBCC" shall not be used.	YES	ignore
Communication Control Port ID	M		9.2.1.15		YES	ignore
RL Information Response		1..<maxnofRLs>1 to <maxnofRLs>			EACH	ignore
>RL ID	M		9.2.1.53		–	
>RL Set ID	M		9.2.2.39			
>Received Total Wideband Power	M		9.2.2.39A		–	
>Diversity Indication	C-NotFirstRL		9.2.1.26		–	
>CHOICE Diversity Indication	M				–	
>>Combining					–	
>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	–	
>>Non Combining or First RL					–	
>>>DCH Information Response	M		9.2.1.20C		–	
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>SSDT Support Indicator	M		9.2.2.46		–	
TFCI2 Bearer Information Response	O		9.2.2.49A		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Condition	Explanation
NotFirstRL	The IE shall be present if the RL is not the first one in the Response IE.

Range Bound	Explanation
MaxnofRLsmaxnofRLs	Maximum number of RLs for one UE.

9.1.37.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All-NBCC" shall not be used.	YES	ignore
Communication Control Port ID	M		9.2.1.15		YES	ignore
RL Information Response		1			YES	ignore
>RL ID	M		9.2.1.53		–	
>UL Time Slot ISCP Info	M		9.2.3.26D		–	
>UL PhysCH SF Variation	M		9.2.3.26B		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.28		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.38 RADIO LINK SETUP FAILURE

9.1.38.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	C-Success		9.2.1.48	The reserved value "All-NBCC" shall not be used	YES	ignore
Communication Control Port ID	O		9.2.1.15		YES	ignore
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		–	
>RL sSpecific					–	
>>Unsuccessful RL Information Response		1..<maxno ofRLs>1 to <maxno ofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>>Successful RL Information Response		0..<maxno ofRLs>0 to <maxno ofRLs-1>		Note: There will never be maxnoofRLs repetitions of this sequence.	EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>RL Set ID	M		9.2.2.39			
>>>Received I _{total} W _{wide Bband Ppower}	M		9.2.2.39A		–	
>>>Diversity Indication	C-NotFirstRL		9.2.1.26		–	
>>>CHOICE Diversity Indication	M				–	
>>>>Combining					–	
>>>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	–	
>>>>>Non Combining or First RL					–	
>>>>>DCH Information Response	M		9.2.1.20C		–	
>>>DSCH Information Response	O		9.2.1.27A		YES	ignore
>>>TFCI2 Bearer Information Response	O		9.2.2.49A		–	
>>>SSDT Support Indicator	M		9.2.2.46		–	

Criticality Diagnostics	O		9.2.1.17		YES	ignore
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Condition	Explanation
Success	The IE shall be present if at least one of the radio links has been successfully set up.
NotFirstRL	The IE shall be present if the RL is not the first one in the Successful RL Information Response IE.

Range bBound	Explanation
MaxnoofRLsmaxnoofRLs	Maximum number of RLs for one UE.

9.1.38.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		-	
CHOICE Cause Level	M				YES	ignore
>General					-	
>>Cause	M		9.2.1.6		-	
>RL sSpecific					-	
>>Unsuccessful RL Information Response		41			YES	ignore
>>>RL ID	M		9.2.1.53		-	
>>>Cause	M		9.2.1.6		-	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.39 RADIO LINK ADDITION REQUEST

9.1.39.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
Compressed Mode Deactivation Flag	O		9.2.2.3A		YES	reject
RL Information		<i>1..<maxno ofRLs-1></i>			EACH	notify
>RL ID	M		9.2.1.53		–	
>C-ID	M		9.2.1.9		–	
>Frame Offset	M		9.2.1.31		–	
>Chip Offset	M		9.2.2.2		–	
>Diversity Control_Field	M		9.2.1.25		–	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		–	
>Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	–	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>SSDT Cell Identity	O		9.2.2.44		–	
>Transmit Diversity Indicator	O		9.2.2.53		–	

Range Bound	Explanation
<i>MmaxnoofRLs</i>	Maximum number of RLs for one UE

9.1.39.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		YES	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All-NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		YES	
UL CCTrCH Information		0..<maxno CCTrCH> 0 to <maxno CCTrCH>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		-	
>UL DPCH Information		0..10..1			YES	notify
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>UL Timeslot Information	M		9.2.3.26C		-	
DL CCTrCH Information		0..<maxno CCTrCH> 0 to <maxno CCTrCH>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		-	
>DL DPCH information		0..10..1			YES	notify
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>DL Timeslot Information	M		9.2.3.4E		-	
RL Information		14			YES	reject
>RL ID	M		9.2.1.53		-	
>C-ID	M		9.2.1.9		-	
>Frame Offset	M		9.2.1.31		-	
>Diversity Control Field	M		9.2.1.25		-	
>Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	-	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	-	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	-	
>DL Time Slot ISCP Info	O		9.2.3.4F		-	

Range Bound	Explanation
MaxnoCCTrCHmaxnoCCTrCH	Number of CCTrCH for one UE.

9.1.40 RADIO LINK ADDITION RESPONSE

9.1.40.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information Response		$1..<1..<maxnoofRLs-1>$			EACH	ignore
>RL ID	M		9.2.1.53		–	
>RL Set ID	M		9.2.2.39		–	
> Received Total Wideband Power	M		9.2.2.39A		–	
>Diversity Indication	M		9.2.1.26		–	
>CHOICE Diversity Indication	M				–	
>>Combining					–	
>>>RL ID	M		9.2.1.53	Reference RL	–	
>>Non Combining					–	
>>>DCH Information Response	M		9.2.1.20C		–	
>SSDT Support Indicator	M		9.2.2.46		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
$MmaxnoofRLs$	Maximum number of RLs for one UE

9.1.40.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information Response		14			YES	ignore
>RL ID	M		9.2.1.53		–	
>UL Time Slot ISCP Info	M		9.2.3.26D		–	
>UL PhysCH SF Variation	M		9.2.3.26B		–	
>DCH Information		0..10..1			–	
>>Diversity Indication	M		9.2.1.26		–	
>>CHOICE Diversity Indication	M				–	
>>>Combining				In TDD it indicates whether the old Transport Bearer shall be reused or not	–	
>>>>RL ID	M		9.2.1.53	Reference RL	–	
>>>>>Non Combining					–	
>>>>DCH Information Response	M		9.2.1.20C		–	
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.41 RADIO LINK ADDITION FAILURE

9.1.41.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		–	
>RL sSpecific					–	
>>Unsuccessful RL Information Response		1..<1..<maxnoofRLs-1>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>>Successful RL Information Response		0..<0..<maxnoofRLs-2>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>RL Set ID	M		9.2.2.39		–	
>>>Received Ttotal Wwide Bband Ppower	M		9.2.2.39A		–	
>>>Diversity Indication	M		9.2.1.26		–	
>>>CHOICE Diversity Indication	M				–	
>>>>Combining					–	
>>>>>RL ID	M		9.2.1.53	Reference RL	–	
>>>>Non Combining					–	
>>>>>DCH Information Response	M		9.2.1.20C		–	
>>>SSDT Ssupport Iindicator	M		9.2.2.46		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range bBound	Explanation
MmaxnoofRLs	Maximum number of RLs for one UE

9.1.41.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		–	
>RL sSpecific					–	
>>Unsuccessful RL Information Response		14			YES	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.42 RADIO LINK RECONFIGURATION PREPARE

9.1.42.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL DPCH Information		0..1			YES	reject
>UL Scrambling Code	O		9.2.2.59		–	
>UL SIR Target	O		UL SIR 9.2.2.58		–	
>Min UL Channelisation Code Length	O		9.2.2.22		–	
>Max Number of UL DPDCHs	C-CodeLen		9.2.2.21		–	
>Puncture Limit	O		9.2.1.50	For UL	–	
>TFCS	O		9.2.1.58		–	
>UL DPCCH Slot Format	O		9.2.2.57		–	
>Diversity Mode	O		9.2.2.9		–	
>SSDT Cell Identity Length	O		9.2.2.45		–	
>S-Field Length	O		9.2.2.40		–	
DL DPCH Information		0..1			YES	reject
>TFCS	O		9.2.1.58		–	
>DL DPCH Slot Format	O		9.2.2.10		–	
>TFCI Signalling Mode	O		9.2.2.50		–	
>TFCI Presence	C-Slot Format		9.2.1.57		–	
>Multiplexing Position	O		9.2.2.23		–	
>PDSCH Code Mapping	O		9.2.2.25		–	
>PDSCH RL ID	O		RL ID 9.2.1.53		–	
>Limited Power Increase	O		9.2.2.18A		–	
DCHs To Modify	O		DCHs FDD To Modify 9.2.2.4E		YES	reject
DCHs To Add	O		DCH FDD Information 9.2.2.4D		YES	reject
DCHs To Delete		0..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
DSCH To Modify		0..<maxno ofDSCHs>			YES EACH	reject
>DSCH ID	M		9.2.1.27		–	
>Transport Format Set	O		9.2.1.59	For the DL.	–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>Frame Handling Priority	O		9.2.1.30		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	

>Transport Bearer Request – Indicator	M		9.2.1.62A		–	
DSCH to a Add	O		DSCH FDD Information 9.2.2.13B		YES	reject
DSCH to Delete		<i>0..<maxno ofDSCHs></i>			YESEACH	reject
>DSCH ID	M		9.2.1.27		–	
TFCI2 bBearer specific iInformation		<i>0..10..4</i>			YES	reject
>CHOICE - TFCI2 bBearer aAction	M				–	
>>Add or m Modify					–	
>>>ToAWS	M		9.2.1.61		–	
>>>ToAWE	M		9.2.1.60		–	
>>Delete			NULL		–	
RL Information		<i>0..<maxno ofRLs></i>			EACH	reject
>RL ID	M		9.2.1.53		–	
>DL Code Information	O		FDD DL Code Information 9.2.2.14A		–	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>SSDT Indication	O		9.2.2.47		–	
>SSDT Cell Identity	C – SSDTIndO N		9.2.2.44		–	
>Transmit Diversity Indicator	C – Diversity mode		9.2.2.53		–	
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject

Condition	Explanation
SSDTIndON	The IE shall be present if the <i>SSDT Indication</i> IE is set to "SSDT Active in the UE".
CodeLen	The IE shall be present if <i>Min UL Channelisation Code Length</i> IE equals to 4.
SlotFormat	The IE shall be present if the <i>DL DPCH Slot Format</i> IE is equal to any of the values from 12 to 16.
Diversity mode	The IE shall be present if the <i>Diversity Mode</i> IE is present in the <i>UL DPCH Information</i> IE and is not set to "none".

Range Bound	Explanation
M maxnoofDCHs	Maximum number of DCHs for a UE.
M maxnoofDSCHs	Maximum number of DSCHs for a UE.
M maxnoofRLs	Maximum number of RLs for a UE.

9.1.42.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCH TrCH τTo Add		<i>0..<maxno of CCH TrCHs></i>			GLOBAL	reject
>CCH TrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
>UL DPCH Information		<i>0..1</i>			YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
UL CCH TrCH τTo Modify		<i>0..<maxno of CCH TrCHs></i>			GLOBAL	reject
>CCH TrCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>TFCI Coding	O		9.2.3.22		–	
>Puncture Limit	O		9.2.1.50		–	
>UL DPCH τTo Add		<i>0..1</i>			YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH τTo Modify		<i>0..1</i>			YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD DPCH Offset	O		9.2.3.19A		–	
>>UL Timeslot Information		<i>0..<maxno of ULts> to <maxno of ULts></i>			–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift and Burst Type	O		9.2.3.7		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>UL Code Information		<i>0..<maxno of DPCHs></i>			–	

		0 to <maxnoOf DPCH>				
>>>>DPCH ID	M		9.2.3.5		-	
>>>>TDD Channelisation Code	O		9.2.3.19		-	
>UL DPCH † To dDelete		0..<maxno ofDPCHs> <maxnoof DPCHs>			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		-	
UL CCTrCH † To Delete		0..<maxno ofCCTrCH s> <maxnoof CCTrCHs >			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		-	
DL CCTrCH † To Add		0..<maxno ofCCTrCH s>0.. <maxnoof CCTrCHs >			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		-	
>TFCS	M		9.2.1.58		-	
>TFCI Coding	M		9.2.3.22		-	
>Puncture_Limit	M		9.2.1.50		-	
>TPC CCTrCH List		0..<maxno ofCCTrCH s>0 to <maxnoC CTrCHs>		List of uplink CCTrCH which provide TPC	-	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		-	
>DL DPCH Information		0..1			YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>DL Timeslot Information	M		9.2.3.4E		-	
DL CCTrCH † To Modify		0..<maxno ofCCTrCH s>0.. <maxnoof CCTrCHs >			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3.		-	
>TFCS	O		9.2.1.58		-	
>TFCI Coding	O		9.2.3.22		-	
>Puncture_Limit	O		9.2.1.50		-	
>TPC CCTrCH List		0..<maxno ofCCTrCH s>0 to <maxnoC CTrCHs>		List of uplink CCTrCH which provide TPC	-	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		-	
>DL DPCH to aAdd		0..1			YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>DL Timeslot	M		9.2.3.4E		-	

Information						
>DL DPCH to m Modify		0..1			YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD DPCH Offset	O		9.2.3.19A		-	
>>>DL Timeslot Information		0..<maxno ofDLts>0..<maxnoof DLts>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift and Burst Type	O		9.2.3.7		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>>DL Code Information		0..<maxno ofDPCHs>0..<maxnoOf DPCH>			-	
>>>>DPCH ID	M		9.2.3.5		-	
>>>>TDD Channelisation Code	O		9.2.3.19		-	
>DL DPCH t To d Delete		0..<maxno ofDPCHs><maxnoof DPCHs>			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		-	
DL CCTrCH t To Delete		0..<maxno ofCCTrCH s>0..<maxnoof CCTrCHs>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		-	
DCHs t To Modify	O		DCHs TDD t To Modify 9.2.3.4D		YES	reject
DCHs t To Add	O		DCH TDD Information 9.2.3.4C		YES	reject
DCHs t To Delete		0..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M		9.2.1.20		-	
DSCH Information t To m Modify		0..<maxno ofDSCHs>0..<Maxnoof DSCHs>			GLOBAL	reject
>DSCH ID	M		9.2.1.27		-	
>CCTrCH ID	O		9.2.3.3	DL CCTrCH in which the DSCH is mapped	-	
>Transport Format Set	O		9.2.1.59		-	
>Allocation/Retention Priority	O		9.2.1.1A		-	
>Frame Handling Priority	O		9.2.1.30		-	
>ToAWS	O		9.2.1.61		-	
>ToAWE	O		9.2.1.60		-	
>Transport Bearer Request - Indicator	M		9.2.1.62A		-	
DSCH Information t To a Add	O		DSCH TDD Information		YES	reject

			9.2.3.5A			
DSCH Information ToDelete		<i>0..<maxno ofDSCHs> 0.. <Maxnoof DSCHs></i>			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
USCH Information Modify		<i>0..<maxno ofUSCHs> 0.. <Maxnoof USCHs></i>			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
>Transport Format Set	O		9.2.1.59		–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>CCTrCH ID	O		9.2.3.2	UL CCTrCH in which the USCH is mapped	–	
>Transport Bearer Request – Indicator	M		9.2.1.62A		–	
USCH Information Add	O		USCH Information 9.2.3.28		YES	reject
USCH Information Delete		<i>0..<maxno ofUSCHs> 0.. <Maxnoof USCHs></i>			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
RL Information		<i>0..1</i>			YES	reject
>RL ID	M		9.2.1.53		–	
>Maximum Downlink Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum Downlink Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore

Range Bound	Explanation
<i>MmaxnoofDCHs</i>	Maximum number of DCHs for a UE.
<i>MmaxnoofCCTrCHs</i>	Maximum number of CCTrCHs for a UE.
<i>MmaxnoofDPCHs</i>	Maximum number of DPCHs in one CCTrCH.
<i>MmaxnoofDSCHs</i>	Maximum number of DSCHs for one UE
<i>MmaxnoofUSCHs</i>	Maximum number of USCHs for one UE
<i>MmaxnoofDLts</i>	Maximum number of Downlink time slots per Radio Link
<i>MmaxnoofULts</i>	Maximum number of Uplink time slots per Radio Link

9.1.43 RADIO LINK RECONFIGURATION READY

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information Response		0..<maxno ofRLs>		Only one RL information response group for one group of combined RLs shall be present	EACH	ignore
>RL ID	M		9.2.1.53		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29	TDD only	YES	ignore
>TFCI2 Bearer Information Response	O		9.2.2.49A	FDD only	–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
$M_{maxnoofRLs}$	Maximum number of RLs for a UE.

9.1.44 RADIO LINK RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		YES	ignore
>RL sSpecific					–	
>>RLs Causing Reconfiguration Failure		0..<maxno ofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
<i>M</i> maxnoofRLs	Maximum number of RLs for a UE.

9.1.45 RADIO LINK RECONFIGURATION COMMIT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message type	M		9.2.1.46		YES	ignore
Transaction ID	<i>M</i>		9.2.1.62		<i>Y</i>	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	ignore
Transaction ID	<i>M</i>		9.2.1.62		<i>Y</i>	
CFN	M		9.2.1.7		YES	ignore
Active Pattern Sequence Information	O		9.2.2.A		YES	ignore

9.1.46 RADIO LINK RECONFIGURATION CANCEL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message type	M		9.2.1.46		YES	ignore
Transaction ID	<i>M</i>		9.2.1.62		<i>Y</i>	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	ignore
Transaction ID	<i>M</i>		9.2.1.62		<i>Y</i>	

9.1.47 RADIO LINK RECONFIGURATION REQUEST

9.1.47.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL DPCH Information		0..1			YES	reject
>TFCS	O		9.2.1.58	For the UL.	–	
DL DPCH Information		0..1			YES	reject
>TFCS	O		9.2.1.58	For the DL.	–	
>TFCI Signalling Mode	O		9.2.2.50		–	
>Limited Power Increase	O		9.2.2.18A		–	
DCHs \dagger To Modify	O		DCHs FDD \dagger To Modify 9.2.2.4E		YES	reject
DCHs \dagger To Add	O		DCH FDD Information 9.2.2.4D		YES	reject
DCHs \daggerTo Delete		0..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
Radio Link Information		0..<maxno ofRLs>			EACH	reject
>RL ID	M		9.2.1.53		–	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>DL Code Information	C-SF/2		FDD DL Code Information 9.2.2.14A		–	
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject

Range Bound	Explanation
$M_{maxnoofDCHs}$	Maximum number of DCHs for a UE.
$M_{maxnoofRLs}$	Maximum number of RLs for a UE.

Condition	Explanation
SF/2	The IE shall be present if the <i>Transmission Gap Pattern Sequence Information</i> IE is included and the indicated Downlink Compressed Mode method for at least one of the included Transmission Gap Pattern Sequence is set to "SF/2".

9.1.47.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCH TrCH \uparrow To mModify		0..<maxno of CCH TrCHs>			EACH	notify
>CCH TrCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>Puncture Limit	O		9.2.1.50		–	
UL CCH TrCH \uparrow To dDelete		0..<maxno of CCH TrCHs>			EACH	notify
>CCH TrCH ID	M		9.2.3.3		–	
DL CCH TrCH \uparrow To mModify		0..<maxno of CCH TrCHs>			EACH	notify
>CCH TrCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>Puncture Limit	O		9.2.1.50		–	
DL CCH TrCH \uparrow To dDelete		0..<maxno of CCH TrCHs>			EACH	notify
>CCH TrCH ID	M		9.2.3.3		–	
DCHs \uparrow To Modify	O		DCHs TDD \uparrow To Modify 9.2.3.4D		YES	reject
DCHs \uparrow To Add	O		DCH TDD Information 9.2.3.4C		YES	reject
DCHs \uparrow To Delete		0..<maxno of DSCHs>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
RL Information		0..1			YES	reject
>RL ID	M		9.2.1.53		–	
>Maximum Downlink Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum Downlink Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	

Range bBound	Explanation
$M_{maxnoofCCHTrCHs}$	Maximum number of CCH TrCHs for a UE.

9.1.48 RADIO LINK RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information Response		0..<maxno ofRLs>		Only one RL information response group for one group of combined RLs shall be present	EACH	ignore
>RL ID	M		9.2.1.53		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range bBound	Explanation
MmaxnoofRLs	Maximum number of RLs for a UE.

9.1.49 RADIO LINK DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
CRNC Communication Context ID	M		9.2.1.18		YES	reject
Transaction ID	M		9.2.1.62		–	
RL Information		1..<maxno ofRLs>			EACH	notify
>RL ID	M		9.2.1.53		–	

Range bBound	Explanation
MmaxnoofRLs	Maximum number of radio links for one UE

9.1.50 RADIO LINK DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.51 DL POWER CONTROL REQUEST [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Power Adjustment Type	M		9.2.2.27		YES	ignore
DL Reference Power	C-Common		DL power 9.2.1.21	Power on DPCH	YES	ignore
Inner Loop DL PC Status	O		9.2.2.18B		YES	ignore
DL Reference Power Information	C-Individual	$1..<maxno\ of\ RLS>1..<maxno\ of\ RLS>$			GLOBAL E ACH	ignore
>RL ID	M		9.2.1.53		–	
>DL Reference Power	M		DL power 9.2.1.21	Power on DPCH	–	
Max Adjustment Step	C-Common Or Individual		9.2.2.20		YES	ignore
Adjustment Period	C-Common Or Individual		9.2.2.B		YES	ignore
Adjustment Ratio	C-Common Or Individual		9.2.2.C		YES	ignore

Condition	Explanation
Common	The IE shall be present if the <i>Adjustment Type</i> IE is equal to "Common".
Individual	The IE shall be present if the <i>Adjustment Type</i> IE is equal to "Individual".
CommonOrIndividual	The IE shall be present if the <i>Adjustment Type</i> IE is equal to "Common" or "Individual".

Range Bound	Explanation
$Maxno\ of\ RLS\ maxno\ of\ RLS$	Maximum number of Radio Links for a UE

9.1.52 DEDICATED MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used when the Report characteristics type is set to "On-Demand".	YES	reject
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	reject
Dedicated Measurement Object Type	M		9.2.1.22		YES	reject
CHOICE <i>Dedicated Measurement Object Type</i>	M				YES	reject
>>RL					–	
>>RL Information		<i>1..<maxno ofRLs>1..<maxnoofRLs></i>			EACH	reject
>>>RL ID	M		9.2.1.53		–	
>>>DPCH ID	O		9.2.3.5	TDD only	–	
>>RLS				FDD only	–	
>>RL Set Information		<i>1..<maxno ofRLSets>1..<maxno ofRLSets></i>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		–	
>>ALL RL			NULL		–	
>>ALL RLS			NULL	FDD only	–	
Dedicated Measurement Type	M		9.2.1.23		YES	reject
Measurement Filter Coefficient	O		9.2.1.41		YES	reject
Report Characteristics	M		9.2.1.51		YES	reject
CFN r Reporting i ndicator	M		FN r Reporting i ndicator 9.2.1.29B		YES	reject
CFN	O		9.2.1.7		YES	reject

Range Bound	Explanation
<i>MmaxnoofRLs</i>	Maximum number of individual RLS a measurement can be started on-
<i>MmaxnoofRLSets</i>	Maximum number of individual RL Sets a measurement can be started on-

9.1.53 DEDICATED MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18		YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE <i>Dedicated Measurement Object Type</i>	O			Dedicated Measurement Object Type the measurement was initiated with	YES	ignore
>>RL or of ALL RL					–	
>>RL Information		1..<maxno ofRLs>1..<maxnoofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>DPCH ID	O		9.2.3.5	TDD only	–	
>>>Dedicated Measurement Value	M		9.2.1.24		–	
>>>CFN	O		9.2.1.7	Dedicated Measurement Time Reference	–	
>>RLS or of ALL RLS				FDD only	–	
>>RL Set Information		1..<maxno ofRLSets>1..<maxno ofRLSets>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		–	
>>>Dedicated Measurement Value	M		9.2.1.24		–	
>>>CFN	O		9.2.1.7	Dedicated Measurement Time Reference	–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
MmaxnoofRLs	Maximum number of individual RLS the measurement can be started on.
MmaxnoofRLSets	Maximum number of individual RL Sets a measurement can be started on.

9.1.54 DEDICATED MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18		YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.55 DEDICATED MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE <i>Dedicated Measurement Object Type</i>	M			Dedicated Measurement Object Type the measurement was initiated with	YES	ignore
<i>>>RL or of ALL RL</i>					–	
>>RL Information		<i>1..<maxno ofRLs>1..<maxno ofRLs></i>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>DPCH ID	O		9.2.3.5	TDD only	–	
>>>Dedicated Measurement Value Information	M		9.2.1.24A		–	
<i>>>RLS or of ALL RLS</i>				FDD only	–	
>>RL Set Information		<i>1..<maxno ofRLSets>1..<maxno ofRLSets></i>			EACH	ignore
>>>RL Set ID	M		9.2.1.39		–	
>>>Dedicated Measurement Value Information	M		9.2.1.24A		–	

Range Bound	Explanation
<i>M</i> _{maxnoofRLs}	Maximum number of individual RLs the measurement can be started on.
<i>M</i> _{maxnoofRLSets}	Maximum number of individual RL Sets a measurement can be started on.

9.1.56 DEDICATED MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All-NBC C" shall be used if this value was used when initiating the measurement. Otherwise, the reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore

9.1.57 DEDICATED MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNCCC" shall be used if the Node B Communication Context ID was set to "All NBCC" when initiating the measurement. Otherwise, the reserved value "All CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore

9.1.58 RADIO LINK FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Reporting Object	M			Object for which the Failure shall be reported.	YES	ignore
>>RL					–	
>>RL Information		1 to <M1..<maxnoofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>>RL Set				FDD only	–	
>>RL Set Information		1 to <M1..<maxnoofRLS ets>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		–	
>>>Cause	M		9.2.1.6		–	
→>>CCTrCH				TDD only	–	
>>RL ID	M		9.2.1.53		–	
>>CCTrCH List		1 to <M1..<maxnoofCCTrCHs>			EACH	ignore
>>>CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
>>>Cause	M		9.2.1.6		–	

Range Bound	Explanation
MmaxnoofRLs	Maximum number of RLs for one UE.
MmaxnoofRLSets	Maximum number of RL Sets for one UE.
MmaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.1.59 RADIO LINK RESTORE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Reporting Object	M			Object for which the Restoration shall be reported.	YES	ignore
>>RL					–	
>>Radio Link Information		1 to <M1..<maxnoofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>RL Set				FDD only	–	
>>RL Set Information		1 to <M1..<maxnoofRLSets>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		–	
→>>CCTrCH				TDD only	–	
>>RL ID	M		9.2.1.53		–	
>>CCTrCH List		1 to <M1..<maxnoofCCTrCHs>			EACH	ignore
>>>CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	

Range Bound	Explanation
<i>M</i> maxnoofRLs	Maximum number of RLs for one UE.
<i>M</i> maxnoofRLSets	Maximum number of RL Sets for one UE.
<i>M</i> maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.1.60 COMPRESSED MODE COMMAND [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B eCommunication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Active Pattern Sequence Information	M		9.2.2.A		YES	ignore

9.1.61 ERROR INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	O		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Node B Communication Context ID	O		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Cause	O		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.62 PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
SFN	O		9.2.1.53A		YES	reject
PDSCH Sets TIo aAdd		0..<maxno of PDSCH Sets>			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		–	
>PDSCH TIo aAdd Information		1			YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD Physical Channel Offset	M		9.2.3.20		–	

>>DL Timeslot Information		<i>1..<maxno ofDLts>1..<maxnoof DLts></i>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift Aand Burst Type	M		9.2.3.7		-	
>>>TFCI Presence	M		9.2.1.57		-	
>>>DL Code Information		<i>1..<maxno ofPDSCHs>1..<maxnoOf PDSCH></i>			-	
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
PDSCH Sets <i>t</i>To Modify		<i>0..<maxno of PDSCHsets></i>			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		-	
>PDSCH <i>t</i>To mModify Information		1			YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD Physical Channel Offset	O		9.2.3.20		-	
>>DL Timeslot Information		<i>0..<maxno ofDLts>0..<maxnoof DLts></i>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift Aand Burst Type	O		9.2.3.7		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>DL Code Information		<i>0..<maxno ofPDSCHs>0..<maxnoOf PDSCH></i>			-	
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
PDSCH Sets <i>t</i>To Delete		<i>0..<maxno of PDSCHsets></i>			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		-	
PUSCH Sets <i>t</i>To aAdd		<i>0..<maxno of PUSCHsets></i>			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	
>PUSCH <i>t</i>To aAdd Information		1			YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD Physical Channel Offset	M		9.2.3.20		-	

>>UL Timeslot Information		<i>1..<maxno ofULts>1.. <maxnoof ULts></i>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift Aand Burst Type	M		9.2.3.7		-	
>>>TFCI Presence	M		9.2.1.57		-	
>>>UL Code Information		<i>1..<maxno ofPUSCHs >=1.. <maxnoOf PUSCH></i>			-	
>>>>PUSCH ID	M		9.2.3.12		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
PUSCH Sets tTo Modify		<i>0..<maxno of PUSCHSe ts></i>			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	
>PUSCH tTo mModify Information		1			YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD Physical Channel Offset	O		9.2.3.20		-	
>>UL Timeslot Information		<i>0..<maxno ofULts>0.. <maxnoof ULts></i>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift Aand Burst Type	O		9.2.3.7		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>UL Code Information		<i>0..<maxno ofPUSCHs >=0.. <maxnoOf PDSCH></i>			-	
>>>>PUSCH ID	M		9.2.3.12		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
PUSCH Sets tTo Delete		<i>0..<maxno of PUSCHSe ts></i>			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	

Range bBound	Explanation
<i>Mmaxnoof-PDSCH-Sets</i>	Maximum number of PDSCH Sets in a cell.
<i>Mmaxnoof-PDSCHs</i>	Maximum number of PDSCHs in a cell.
<i>Mmaxnoof-PUSCH-Sets</i>	Maximum number of PUSCH Sets in a cell.
<i>Mmaxnoof-PUSCHs</i>	Maximum number of PUSCHs in a cell.
<i>MmaxnoofDLts</i>	Maximum number of Downlink time slots in a cell
<i>MmaxnoofULts</i>	Maximum number of Uplink time slots in a cell

9.1.63 PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		==	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		==	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.64 PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		==	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		==	
CHOICE <i>C</i> cause <i>L</i> level	M				YES	ignore
>General					-	
>>Cause	M		9.2.1.6		-	
>>Set specific					-	
>>Unsuccessful DL Shared Channel Set>>Unsuccessful-DL Shared-channel set		0..<maxno ofPDSCH Sets>0..<maxnoofPDSCHSets>			EACH	ignore
>>>PDSCH Set ID	M		9.2.3.13		==	
>>>Cause	M		9.2.1.6		YES	ignore
>>Unsuccessful UL Shared Channel Set>>Unsuccessful-UL Shared-channel set		0..<maxno ofPUSCH Sets>0..<maxnoofPUSCHSets>			EACH	ignore
>>>PUSCH Set ID	M		9.2.3.13		==	
>>>Cause	M		9.2.1.6		==	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range bBound	Explanation
<i>M</i> maxnoof-PDSCH-Sets	Maximum number of PDSCH Sets in a cell.
<i>M</i> maxnoof-PUSCH-Sets	Maximum number of PUSCH Sets in a cell.

9.1.65 RESET REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	

CHOICE <i>Reset Indicator</i>	M				YES	ignore
<i>>>Communication Context</i>					-	
>>>>Communication Context Information		1..<maxCommunicationContext>			EACH	reject
>>>CHOICE <i>Communication Context Type</i>	M				-	
>>>>CRNC <i>Communication Context</i>					-	
>>>>>CRNC <i>Communication Context ID</i>	M		9.2.1.18		-	
>>>>Node B <i>Communication Context</i>					-	
>>>>>Node B <i>Communication Context-ID</i>	M		9.2.1.48		-	
<i>>>Communication Control Port</i>					-	
>>>>Communication Control Port Information		1..<maxCCPinNodeB>			EACH	reject
>>>Communication <i>Control Port ID</i>	M		9.2.1.15		-	
<i>>>Node B</i>			NULL		-	

Range bBound	Explanation
<i>maxCommunicationContext</i>	Maximum number of <i>C</i> ommunication <i>C</i> ontexts that can exist in the Node-B
<i>maxCCPinNodeB</i>	Maximum number of <i>C</i> ommunication <i>C</i> ontrol <i>p</i> orts that can exist in the Node B

9.1.66 RESET RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.67 DL POWER TIMESLOT CONTROL REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
DL Time Slot ISCP Info	M		9.2.3.4F		YES	ignore

9.1.68 RADIO LINK PREEMPTION REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18		YES	ignore
RL Information		0..<maxno ofRLs>			EACH	ignore
>RL ID	M		9.2.1.53		–	

Range Bound	Explanation
MaxnoofRLsmaxnoofRLs	Maximum number of radio links for one UE

9.2 Information Element Functional Definition and Contents

9.2.0 General

Subclause 9.2 presents the NBAP IE definitions in tabular format. The corresponding ASN.1 definition is presented in Subclause 9.3. In case there is a contradiction between the tabular format in Subclause 9.2 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, where the tabular format shall take precedence.

When specifying information elements which are to be represented by bitstrings, if not otherwise specifically stated in the semantics description of the concerned IE or elsewhere, the following principle applies with regards to the ordering of bits:

- The first bit (leftmost bit) contains the most significant bit (MSB);
- The last bit (rightmost bit) contains the least significant bit (LSB);
- When importing bitstrings from other specifications, the first bit of the bitstring contains the first bit of the concerned information;

9.2.1 Common parameters

9.2.1.1 Add/Delete Indicator

The add/delete indicator shall notify the CRNC whether the associated resource has been added to or removed from the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Add/Delete Indicator			ENUMERATED_(Add, Delete)	

9.2.1.1A Allocation/Retention Priority

This parameter indicates the priority level in the allocation and retention of Node B internal resources. See Annex A.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Priority Level	M		INTEGER (spare (0), highest (1), ..., lowest (14), no priority (15)) (0..15)	This IE indicates the priority of the request. Usage: Value "0" means "Spare"; It shall be treated as a logical error if received. -Values between "1" and "14" are ordered in decreasing order of priority, "1" being the highest and "14" the lowest. Value "15" means "No Priority". Value "0" shall be treated as a logical error if received.
Pre-emption Capability	M		ENUMERATED_(shall not trigger pre-emption, may trigger pre-emption)	
Pre-emption Vulnerability	M		ENUMERATED (not pre-emptable, pre-emptable)	

9.2.1.2 Availability Status

The availability status is used to indicate more detailed information of the availability of the resource. In accordance with ref. [6], following values are defined. If the value of this attribute is an empty set, this implies that none of the status conditions described in ref. [6] are present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Availability Status			ENUMERATED (empty, in test, failed, power off, off line, off duty, dependency, degraded, not installed, log full, ...)	

9.2.1.3 BCCH Modification Time

Indicates the time after which the new system information shall be applied on BCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
BCCH Modification Time			Integer-INTEGER (0..511)	All SFN values in which MIB may be mapped are allowed. The tabular description is presented in [18].

9.2.1.4 Binding ID

The Binding ID is the identifier of a user data stream. It is allocated at the Node B and it is unique for each transport bearer under establishment to/from the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Binding ID			Octetstring-OCTET STRING (1..4,...)	

9.2.1.5 Blocking Priority Indicator

The Blocking priority indicator shall indicate the immediacy with which a resource should be blocked from use. The following priority classes shall be supported in the Blocking priority indicator.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Blocking Priority Indicator			ENUMERATED (High, Normal, Low, ...)	"High" priority: Block resource immediately. "Normal" priority: Block resource when idle or upon timer expiry. "Low" priority: Block resource when idle.

9.2.1.6 Cause

IE/Group Name	Presence	Range	IE #Type and #Reference	Semantics #Description
CHOICE Cause Group				
>Radio Network Layer				
>>Radio Network Layer Cause	M		EnumeratedENUMERATED (unknown C-ID, Cell not available, Power level not supported, DL radio resources not available, UL radio resources not available, RL Already Activated/allocated, Node B Resources Unavailable, Measurement not supported for the object, Combining Resources not available, Requested configuration not supported, Synchronization failure, Priority transport channel established, SIB Origination in Node B not Supported, Requested Tx Diversity Mode not supported, Unspecified, BCCH scheduling error, Measurement Temporarily not Available, Invalid CM Setting, Reconfiguration CFN not elapsed, Number of DL codes not supported, S-CPICH not supported, Combining not supported, UL SF not supported, DL SF not supported, Common Transport Channel Type not supported, Dedicated Transport Channel Type not supported, Downlink Shared Channel Type not supported, Uplink Shared Channel Type not supported, CM not supported, Tx diversity no longer supported, Unknown Local Cell ID, ..., Number of UL codes not supported)	
>Transport Layer				
>>Transport Layer Cause	M		EnumeratedENUMERATED (Transport resource unavailable, Unspecified, ...)	
>Protocol				
>>Protocol Cause			EnumeratedENUMERATED (Transfer syntax error, Abstract syntax error (reject),	

			Abstract syntax error (ignore and notify), Message not compatible with receiver state, Semantic error, Unspecified, Abstract syntax error (falsely constructed message), ...)
>Misc			
>>Miscellaneous Cause	M		Enumerated ENUMERATED (Control processing overload Hardware failure, O&M intervention, Not enough user plane processing resources, Unspecified, ...)

The meaning of the different cause values is described in the following table. In general, "not supported" cause values indicate that the **concerningconcerned** capability is missing. On the other hand, "not available" cause values indicate that the **concerningconcerned** capability is present, but insufficient resources were available to perform the requested action.

Radio Network Layer cause	Meaning
BCCH scheduling error	The Node B has detected an illegal BCCH schedule update (see subclause 8.2.16.3).
Cell not Available,	The concerningconcerned cell or local cell is not available.
Combining not supported	The Node B does not support RL combining for the concerningconcerned cells.
Combining Resources Not Available	The value of the received <i>Diversity Control Field</i> IE was set to "Must", but the Node B cannot perform the requested combining.
CM not supported	The concerningconcerned cell(s) do not support Compressed Mode.
Common Transport Channel Type not supported	The concerningconcerned cell(s) do not support the RACH and/or FACH and/or CPCH Common Transport Channel Type.
Dedicated Transport Channel Type not supported	The concerningconcerned cell(s) do not support the Dedicated Transport Channel Type.
DL Radio Resources not Available	The Node B does not have sufficient DL radio resources available.
DL SF not supported	The concerningconcerned cell(s) do not support the requested DL SF.
DL Shared Channel Type not supported	The concerningconcerned cell(s) do not support the Downlink Shared Channel Type.
Invalid CM Settings	The concerningconcerned cell(s) consider the requested Compressed Mode settings invalid.
Measurement not Supported For The Object	At least one of the concerningconcerned cell(s) does not support the requested measurement on the concerningconcerned object type.
Measurement Temporarily not Available	The Node B can temporarily not provide the requested measurement value.
Node B resources unavailable	The Node B does not have sufficient resources available.
Number of DL codes not supported	The concerningconcerned cell(s) do not support the requested number of DL codes.
Number of UL codes not supported	The concerningconcerned cell(s) do not support the requested number of UL codes.
Power Level not Supported	A DL power level was requested which the concerningconcerned cell(s) do not support.
Priority transport channel established	The CRNC cannot perform the requested blocking since a transport channel with a high priority is present.
Reconfiguration CFN not elapsed	The requested action cannot be performed due to that a RADIO LINK RECONFIGURATION COMMIT message was received previously, but the concerningconcerned CFN has not yet elapsed.
Requested Configuration not Supported	The concerningconcerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters.

Requested Tx Diversity mode not supported	The concerningconcerned cell(s) do not support the requested transmit diversity mode.
RL already Activated/ allocated	The Node B has already allocated an RL with the requested RL-id for this UE context.
S-CPICH not supported	The concerningconcerned cell(s) do not support S-CPICH.
SIB Origination in Node B not Supported	The Node B does not support the origination of the requested SIB for the concerningconcerned cell.
Synchronisation Failure	Loss of UL Uu synchronisation.
Tx diversity no longer supported	Tx diversity can no longer be supported in the concerningconcerned cell.
UL Radio Resources not Available	The Node B does not have sufficient UL radio resources available.
UL SF not supported	The concerningconcerned cell(s) do not support the requested minimum UL SF.
UL Shared Channel Type not supported	The concerningconcerned cell(s) do not support the Uplink Shared Channel Type.
Unknown C-ID	The Node B is not aware of a cell with the provided C-ID.
Unknown Local Cell ID	The Node B is not aware of a local cell with the provided Local Cell ID.
Unspecified	Sent when none of the above cause values applies but still the cause is Radio Network layer related.

Transport Network Layer cause	Meaning
Transport resource unavailable	The required transport resources are not available.
Unspecified	Sent when none of the above cause values applies but still the cause is Transport Network layer related.

Protocol cause	Meaning
Abstract Syntax Error (Reject)	The received message included an abstract syntax error and the concerningconcerned criticality indicated "reject" (see subclause 10.3).
Abstract Syntax Error (Ignore and Notify)	The received message included an abstract syntax error and the concerningconcerned criticality indicated "ignore and notify" (see subclause 10.3).
Abstract syntax error (falsely constructed message)	The received message contained IEs in wrong order or with too many occurrences (see subclause 10.3).
Message not Compatible with Receiver State	The received message was not compatible with the receiver state (see subclause 10.4).
Semantic Error	The received message included a semantic error (see subclause 10.4).
Transfer Syntax Error	The received message included a transfer syntax error (see subclause 10.2).
Unspecified	Sent when none of the above cause values applies but still the cause is protocol related.

Miscellaneous cause	Meaning
Control Processing Overload	Node B control processing overload.
Hardware Failure	Node B hardware failure.
Not enough User Plane Processing Resources	Node B has insufficient user plane processing resources available.
O&M Intervention	Operation and Maintenance intervention related to Node B equipment.
Unspecified	Sent when none of the above cause values applies and the cause is not related to any of the categories Radio Network Layer, Transport Network Layer or Protocol.

9.2.1.7 CFN

Connection Frame Number for the radio connection, see ref. [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
CFN			INTEGER Integer (0..255)	

9.2.1.8 CFN Offset

Void

9.2.1.9 C-ID

The C-ID (Cell identifier) is the identifier of a cell in one RNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
C-ID			INTEGER (0..65535)	

9.2.1.9A Common Channels Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the allocated Spreading Factor. [FDD_ For the PRACH, the reference spreading factor shall be the minimum possible spreading factor amongst the ones defined by the *RACH Slot Format 'RACH-slot-format'* IE(s) in the Common Transport Channel Setup or Reconfiguration procedures. For the PCPCH, the reference spreading factor shall be the minimum spreading factor computed from the TFCS as described in [8].]

This capacity consumption law indicates the consumption law to be used with the following procedures:-

- Common Transport Channel Setup
- Common Transport Channel Deletion
- [FDD_ Common Transport Channel Reconfiguration]

For the Common Transport Channel Setup procedure, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall be credited to the Capacity Credit for the Common Transport Channel Deletion one.

[FDD_ For the Common Transport Channel Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited if this difference is negative).]

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the "DL cost" shall be applied to the "DL or Global Capacity Credit" and the "UL Cost" shall be applied to the "UL Capacity Credit". If it is modelled as shared resources, both the "DL cost" and the "UL cost" shall be applied to the "DL or Global Capacity Credit".

[FDD_ When the Common Transport Channel Setup, Deletion or Reconfiguration procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH, AICH, PCPCH, CD/CA-ICH and AP-AICH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

[FDD_ The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by a physical channel, the cost credited to or debited from the Capacity Credit for this physical channel shall be taken as N times the cost given in the consumption law, where N is the number of channelization codes.]

[TDD - When the Common Transport Channel Setup, or Deletion procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SF Allocation Law <i>allocation-law</i>		$1..<max\ no\ of\ SFs><Max\ Number\ Of\ SF>$		[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD – For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL cost	M		INTEGER (0..65535)	
>UL cost	M		INTEGER (0..65535)	

Range Bound	Explanation
$M_{max\ Number\ Of\ SFs}$	Maximum number of Spreading Factors

9.2.1.10 Common Measurement Object Type

The Common Measurement Object type indicates the type of object that the measurement is to be performed on.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Measurement Object Type			ENUMERATED (CELL, RACH, CPCH,...)	

Void.

9.2.1.11 Common Measurement Type

The Common Measurement Type identifies which measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Measurement Type			ENUMERATED (Received Total Wide Band Power, Transmitted Carrier Power, Acknowledged PRACH Preambles, UL Timeslot ISCP, Acknowledged PCPCH Access Preambles, Detected PCPCH Access Preambles, ...)	"UL Timeslot ISCP" is used by TDD only, "Acknowledged PRACH Preambles", "Acknowledged PCPCH Access Preambles", "Detected PCPCH Access Preambles" are used by FDD only

9.2.1.12 Common Measurement Value

The Common Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Common Measurement Value</i>				
->>Transmitted Carrier Power				
>>Transmitted Carrier Power Value	M		INTEGER_(0..100)	According to mapping in [22] and [23]
->>Received Total Wide Band Power				
>>Received t Total w Wide b Band p Power Value	M		INTEGER_(0..621)	According to mapping in [22] and [23]
->>Acknowledged PRACH Preambles				FDD e Only
>>Acknowledged PRACH Preamble Value {FDD-only}	M		INTEGER_(0..240, ...)	According to mapping in [22]
->>UL Timeslot ISCP				TDD e Only
>>UL Timeslot ISCP {TDD-only}	M		INTEGER_(0..127)	According to mapping in [23]
->>Acknowledged PCPCH Access Preambles				FDD e Only
>>Acknowledged PCPCH Access Preambles {FDD-only}	M		INTEGER_(0..15,...)	According to mapping in [22]
->>Detected PCPCH Access Preambles				FDD e Only
>>Detected PCPCH Access Preambles {FDD-only}	M		INTEGER (0..240,...)	According to mapping in [22]

9.2.1.12A Common Measurement Value Information

The *Common Measurement Value Information* IE provides information both on whether or not the Common Measurement Value is provided in the message or not and if provided also the Common Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Measurement Availability Indicator</i>	M			
>>Measurement Available				
>>Common Measurement v Value	M		9.2.1.12	
>>Measurement n Not Available			NULL	

9.2.1.13 Common Physical Channel ID

Common Physical Channel ID is the unique identifier for one common physical channel within a cell.

IE/Group Name	Presence	Range	IE t Type and r Reference	Semantics d Description
Common Physical Channel ID			Integer INTEGER (0..255)	

9.2.1.13A Common Physical Channel Status Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID	M		9.2.1.13	
Resource Operational State	M		9.2.1.52	
Availability Status	M		9.2.1.2	

9.2.1.14 Common Transport Channel ID

Common Transport Channel ID is the unique identifier for one common transport channel within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID			INTEGER (0..255)	

9.2.1.14A Common Transport Channel Information Response

The *Common Transport Channel Information Response* IE provides information for Common Transport Channels that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID	M		9.2.1.14	
Binding ID	O		9.2.1.4	
Transport Layer Address	O		9.2.1.63	

9.2.1.14B Common Transport Channel Status Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID	M		9.2.1.14	
Resource Operational State	M		9.2.1.52	
Availability Status	M		9.2.1.2	

9.2.1.15 Communication Control Port ID

A Communication Control Port corresponds to one signalling bearer between the CRNC and the Node B for the control of Node B Communication Contexts. The Node B may have multiple Communication Control Ports (one per Traffic Termination Point). The Communication Control Port is selected at creation of the Node B Communication Context. The Communication Control Port ID is the identifier of the Communication Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Communication Control Port ID			INTEGER (0..65535)	

9.2.1.16 Configuration Generation ID

The Configuration Generation ID describes the generation of the configuration of logical resources in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Configuration Generation ID			Integer INTEGER (0..255)	Value "0" means "No configuration". At possible wraparound of the ID counter in CRNC the value "0" shall not be used.

9.2.1.17 Criticality Diagnostics

The *Criticality Diagnostics* IE is sent by a Node B or the CRNC when parts of a received message have not been comprehended or are missing, or if the message contained logical errors. When applicable, it contains information about which IEs that were not comprehended or were missing.

For further details on how to use the *Criticality Diagnostics* IE, see Annex C.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Procedure ID		0..10..1		Procedure ID is to be used if Criticality Diagnostics is part of Error Indication procedure, and not within the response message of the same procedure that caused the error	■	
>Procedure Code	M		INTEGER (0..255)		■	
>Ddmode	M		ENUMERATED (FDD, TDD, FDD, Common, ...)	"Common" = common to FDD and TDD.	■	
Triggering Message	O		ENUMERATED_(initiating message, successful outcome, unsuccessful outcome, outcome)	The Triggering Message is used only if the Criticality Diagnostics is part of Error Indication.	■	
Procedure Criticality	O		ENUMERATED_(reject, ignore, notify)	This Procedure Criticality is used for reporting the Criticality of the Triggering message (Procedure).	■	
Transaction ID	O		Transaction ID 9.2.1.62		■	
Information Element Criticality Diagnostics		0..<max no of errors>			■	
>IE Criticality	M		ENUMERATED_(reject, ignore, notify)	The IE Criticality is used for reporting the criticality of the triggering IE. The value "ignore" shall never be used.	■	
>IE ID	M		INTEGER (0..65535)	The IE ID of the not understood or missing IE	■	
>Repetition Number	O		INTEGER (0..255)	The Repetition Number IE gives: <ul style="list-style-type: none"> in case of a not understood IE: The number of occurrences of the reported IE up to and including the not understood occurrence in case of a missing IE: The number of occurrences up to but not including the missing occurrence. 	■	

				Note: All the counted occurrences of the reported IE must have the same topdown hierachical message structure of IEs with assigned criticality above them.		
>Message Structure	O		9.2.1.45A	The <i>Message Structure</i> IE describes the structure where the not understood or missing IE was detected. This IE is included if the not understood IE is not the top level of the message.	YES	ignore
>Type e Of Error	M		ENUMERATED_(not understood, missing, ...)		YES	ignore

Range b Bound	Explanation
M maxnooferrors	Maximum no number of IE errors allowed to be reported with a single message.

9.2.1.18 CRNC Communication Context ID

The CRNC Communication Context ID is the identifier of the Communication Context in the CRNC.

IE/Group Name	Presence	Range	IE t Type and r Reference	Semantics d Description
CRNC Communication Context ID			INTEGER (0..2^20 -1)	"2^20-1" is a reserved value to indicate all the CRNC Communication Contexts that can be reached by the Communication Control Point (All CRNCCC).

9.2.1.18A CTFC

The CTFC is an integer number calculated in accordance with [18], subclause 14.10. Regarding the channel ordering, for all transport channels, 'TrCH1' corresponds to the transport channel having the lowest transport channel identity among all configured transport channels on this CCTrCH. 'TrCH2' corresponds to the transport channel having the next lowest transport channel identity, and so on.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE CTFC Format				
>2 bits long				
>>CTFC value	M		INTEGER (0..3)	
>4 bits long				
>>CTFC value	M		INTEGER (0..15)	
>6 bits long				
>>CTFC value	M		INTEGER (0..63)	
>8 bits long				
>>CTFC value	M		INTEGER (0..255)	
>12 bits long				
>>CTFC value	M		INTEGER (0..4095)	
>16 bits long				
>>CTFC value	M		INTEGER (0..65535)	
>max nb bits long				
>>CTFC value	M		INTEGER (0..maxCTFC)	

Range Bound	Explanation
MaxCTFC	Maximum number of the CTFC value is calculated according to the following: $\sum_{i=1}^I (L_i - 1)P_i$ with the notation according to ref. [18]

9.2.1.19 DCH Combination Indicator

Void

9.2.1.20 DCH ID

The DCH ID is the identifier of an active dedicated transport channel. It is unique for each active DCH among the active DCHs simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCH ID			INTEGER (0..255)	

9.2.1.20A Dedicated Channels Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the [FDD - allocated Spreading Factor and the RL/RLS situation] [TDD – allocated Spreading Factor on each DPCH and the assigned timeslot]. [FDD - In uplink, the reference spreading factor shall be the minimum spreading factor signalled in the Radio Link Setup Request message (*Min UL Channelisation Code Length* IE).]

This capacity consumption law indicates the consumption law to be used with the following procedures:

- Radio Link Setup
- Radio Link Addition
- Radio Link Reconfiguration
- Radio Link Deletion
- [TDD - Physical Shared Channel Reconfiguration]

For the Radio Link Setup and Radio Link Addition procedures, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall be credited to the Capacity Credit for the Radio Link Deletion procedure. For the Radio Link Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited when this difference is negative).

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the DL cost shall be applied to the DL or Global Capacity Credit and the UL Cost shall be applied to the UL Capacity Credit. If it is modelled as shared resources, both the DL costs and the UL costs shall be applied to the DL or Global Capacity Credit.

[FDD - For a Radio Link creating a Radio Link Set (first RL of a RLS), the cost for the RL (cost 2) and RLS (cost 1) shall be taken into account. When adding a Radio Link to a Radio Link Set, only the RL cost (cost 2) shall be taken into account.

In the case of where multiple Radio Links are established in one procedure, for every created Radio Link Set, the first Radio Link is always the Radio Link with the lowest repetition number.]

[FDD- When a PDSCH is allocated in the Radio Link Setup procedure, the processing cost associated to this PDSCH, equal to the DL cost RL, shall be debited from the Capacity Credit, in addition to the processing cost of the radio links. In a similar way, this cost shall be credited to the Capacity Credit, when a PDSCH is deleted and the difference between the new cost and the old cost shall be debited from the Capacity Credit (or credited if this difference is negative) when a PDSCH is reconfigured.]

[FDD- The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by either the radio links or the PDSCH, the cost credited to or debited from the Capacity Credit shall be taken as N times the cost for one code, where N is the number of channelization codes.]

[TDD –The cost for a radio link is a sum of the costs for each DPCH. For the first DPCH assigned to any user in a cell within a timeslot, the initial cost for a DPCH in a timeslot (cost 1) and the cost for a DPCH (cost 2) shall be taken into account. For any DPCH that is not the first DPCH assigned for any user in a cell within a timeslot, only the cost for a DPCH (cost 2) shall be taken into account.]

[TDD – The cost for shared channels is a the sum of the costs for each PDSCH and PUSCH assigned to a PUSCH or PDSCH set. For the first PDSCH or PUSCH assigned to any user in a cell within a timeslot, the initial cost for a PDSCH/PUSCH in a timeslot (cost 1) and the cost for a PDSCH/PUSCH (cost 2) shall be taken into account. For any PDSCH/PUSCH that is not the first PDSCH/PUSCH assigned to any user in a cell within a timeslot, only the cost for a PDSCH/PUSCH (cost 2) shall be taken into account.]

[TDD - In the case of Physical Shared Channel Reconfiguration, the sum of the consumption cost of the each PDSCH/PUSCH of the previous configuration shall be credited to the capacity credit, and the sum of the consumption cost of each PDSCH/PUSCH of the new configuration shall be subtracted from the capacity credit.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SF Allocation Law SF allocation-law		1..<maxno of SFs>1..<MaxNumberOfSF>		[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD - For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL Cost 1	M		INTEGER (0..65535)	[FDD - This is the cost of a RLS ₁ .] [TDD - This is the additional cost of the first DPCH/PDSCH/PUSCH assigned to any user in a cell within a timeslot.]
>DL Cost 2	M		INTEGER (0..65535)	[FDD - This is the cost of a RLS ₂ .] [TDD - This is the cost of a DPCH/PDSCH/PUSCH]
>UL Cost 1	M		INTEGER (0..65535)	FDD - This is the cost of a RLS ₁ . [TDD - This is the additional cost of the first DPCH/PDSCH/PUSCH assigned to any user in a cell within a timeslot.]
>UL Cost 2	M		INTEGER (0..65535)	[FDD - This is the cost of a RLS ₂ .] [TDD - This is the cost of a DPCH/PDSCH/PUSCH.]

Range Bound	Explanation
MmaxNumberOfSFs	Maximum number of Spreading Factors

9.2.1.20B DL or Global Capacity Credit

The capacity credit indicates to the CRNC the Downlink or global capacity of a Local Cell or a Local Cell Group.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL or Global Capacity Credit			INTEGER (0..65535)	

9.2.1.20C DCH Information Response

The *DCH Information Response* IE provides information for DCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
DCH Information Response		1..<maxno of DCHs>1 to <maxno of DCHs>		Only one DCH per set of coordinated DCHs shall be included
>DCH ID	M		9.2.1.20	
>Binding ID	O		9.2.1.4	
>Transport Layer Address	O		9.2.1.63	

Range bBound	Explanation
<i>M</i> _{maxnoofDCHs}	Maximum number of DCH per UE.

9.2.1.21 DL Power

The *DL Power* ~~DL Power~~-IE indicates a power level relative to the [FDD_ primary CPICH power] [TDD_ primary CCPCH power] configured in a cell. [FDD_ If referred to a DPCH, it indicates the power of the transmitted DPDCH symbols]. [FDD_ If referred to a DL-DPCCH for CPCH, it indicates the power of the transmitted pilot symbols].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power			Enumerated ENUMERATED RATED (-35..+15dB)	Step 0.1dB

9.2.1.22 Dedicated Measurement Object Type

The Dedicated Measurement Object type indicates the type of object that the measurement is to be performed on.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated Measurement Object Type			ENUMERATED (RL, RLS, ALL RL, ALL RLS,...)	

Void.

9.2.1.23 Dedicated Measurement Type

The Dedicated Measurement Type identifies the type of measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated Measurement Type			ENUMERATED (SIR, SIR Error, Transmitted Code Power, RSCP, Rx Timing Deviation, Round Trip Time, ...)	"RSCP", "Rx Timing Deviation" are used by TDD only. "Round Trip Time", "SIR Error" are used by FDD only.

Note: For definitions of the measurement types refer to [4] and [5].

9.2.1.24 Dedicated Measurement Value

The Dedicated Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Dedicated Measurement Value</i>				
->> <i>SIR Value</i>				
>>SIR <i>V</i> Value	M		INTEGER_(0..63)	According to mapping in [22] and [23]
->> <i>SIR Error Value</i>				FDD only
>>SIR <i>E</i> error Value	M		INTEGER_(0..125)	According to mapping in [22]
->> <i>Transmitted Code Power Value</i>				
>>Transmitted Code Power Value	M		INTEGER_(0..127)	According to mapping in [22] and [23]. Values 0 to 9 and 123 to 127 shall not be used.
->> <i>RSCP</i>				TDD only
>>RSCP	M		INTEGER_(0..127)	According to mapping in [23]
->> <i>Rx Timing Deviation Value</i>				TDD only
>>Rx Timing Deviation	M		INTEGER_(0..8191)	According to mapping in [23]
->> <i>Round Trip Time</i>				FDD only
>>Round Trip Time	M		INTEGER_(0..32767)	According to mapping in [22]

9.2.1.24A Dedicated Measurement Value Information

The *Dedicated Measurement Value Information* IE provides information both on whether or not the Dedicated Measurement Value is provided in the message or not and if provided also the Dedicated Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Measurement Availability Indicator</i>	M			
>> <i>Measurement Available</i>				
>>Dedicated Measurement Value	M		9.2.1.24	
>>CFN	O		9.2.1.7	Dedicated Measurement Time Reference
>> <i>Measurement N</i> not Available			NULL	

9.2.1.25 Diversity Control Field

The Diversity Control Field indicates if the current RL may, must or must not be combined with the already existing RLs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Diversity Control Field			ENUMERATED_(May, Must, Must <i>n</i> Not)	

9.2.1.26 Diversity Indication

~~The Diversity Indication indicates if the RL has been or has not been combined with another RL.~~

IE/Group Name	Presence	Range	IE Type and Reference	Semantics & Description
Diversity Indication			ENUMERATED (Combined, Not Combined)	

Void

9.2.1.27 DSCH ID

The DSCH ID uniquely identifies a DSCH within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics & Description
DSCH ID			INTEGER (0..255)	

9.2.1.27A DSCH Information Response

The *DSCH Information Response* IE provides information for DSCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics & Descriptions
DSCH Information Response		1..<maxno of DSCHs> 1 to <Num of DSCH>		
>DSCH ID	M		9.2.1.27	
>Binding ID	O		9.2.1.4	
>Transport Layer Address	O		9.2.1.63	

Range Bound	Explanation
Mmaxno of DSCHs	Maximum number of DSCHs for one UE.

9.2.1.28 DSCH Transport Format Set

Void

9.2.1.29 DSCH Transport Format Combination Set

Void

9.2.1.29A End Of Audit Sequence Indicator

Indicates if the AUDIT RESPONSE message ends an audit sequence or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics & Description
End Of Audit Sequence Indicator			ENUMERATED (End of audit sequence, Not end of audit sequence)	"End of audit sequence" = all audit information has been provided by the Node B. "Not end of audit sequence" = more audit information is available.

9.2.1.29B FN \mathfrak{R} eporting \mathfrak{I} ndicator

The Frame Number \mathfrak{R} eporting \mathfrak{I} ndicator_.

\mathfrak{I} ndicates if the SFN or CFN shall be included together with the reported measurement value.

IE/Group Name	Presence	Range	IE \mathfrak{T} ype and \mathfrak{R} eference	Semantics \mathfrak{d} Description
FN \mathfrak{R} eporting \mathfrak{I} ndicator			ENUMERATED_(FN Reporting Required, FN Reporting Not Required)	

9.2.1.30 Frame Handling Priority

This parameter indicates the priority level to be used during the lifetime of the DCH/DSCH for temporary restriction of the allocated resources due overload reason.

IE/Group Name	Presence	Range	IE \mathfrak{T} ype and \mathfrak{R} eference	Semantics \mathfrak{d} Description
Frame Handling Priority			INTEGER (0..15)	"0" = lowest \mathfrak{r} priority, " <u>15</u> " = highest \mathfrak{r} priority

9.2.1.31 Frame Offset

The Frame Offset is the required offset between the dedicated channel downlink transmission frames (CFN, Connection Frame Number) and the broadcast channel frame offset (Cell Frame Number). The Frame_offset is used in the translation between Connection Frame Number (CFN) on Iub/Iur and the least significant 8 bits of SFN (System Frame Number) on Uu. The Frame Offset is UE and cell specific.

IE/Group Name	Presence	Range	IE \mathfrak{T} ype and \mathfrak{R} eference	Semantics \mathfrak{d} Description
Frame Offset			INTEGER (0..255)	Frames

9.2.1.31A IB_OC_ID

The IB OC ID identifies the occurrence of a specific Information Block.

IE/Group Name	Presence	Range	IE \mathfrak{T} ype and \mathfrak{R} eference	Semantics \mathfrak{d} Description
IB_OC_ID			INTEGER (1..16)	

9.2.1.32 IB_SG_DATA

Segment as defined in ref. [18].

IE/Group Name	Presence	Range	IE \mathfrak{T} ype and \mathfrak{R} eference	Semantics \mathfrak{d} Description
IB_SG_DATA			BIT STRING \mathfrak{B} it String	Contains "SIB data fixed" or "SIB data variable" in segment as encoded in ref. [18].

9.2.1.33 IB_SG_POS

The lowest position of a specific Information Block segment in the SFN cycle (IB_SG_POS < IB_SG_REP).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_POS			INTEGER (0..4094)	Only even positions are allowed. See ref. [18]

9.2.1.34 IB_SG_REP

Repetition distance for an Information Block segment. The segment shall be transmitted when SFN mod IB_SG_REP = IB_SG_POS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_REP			ENUMERATED (4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096)	Repetition period for the IB segment in frames

9.2.1.35 IB Type

The IB Type identifies a specific system information block.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB Type			Enumerated ENUMERATED (MIB, SB1, SB2, SIB1, SIB2, SIB3, SIB4, SIB5, SIB6, SIB7, SIB8, SIB9, SIB10, SIB11, SIB12, SIB13, SIB13.1, SIB13.2, SIB13.3, SIB13.4, SIB14, SIB15, SIB15.1, SIB15.2, SIB15.3, SIB16, ..., SIB17, SIB15.4, SIB18)	

9.2.1.36 Indication Type

The indication type shall indicate the category of a failure with respect to its impact on the logical resources supported at the Node-B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Indication Type			ENUMERATED (No-Failure, Service-Impacting, ...)	Service-Impacting – The failure has impacted on the logical resources supported at the Node-B.

Void.

9.2.1.37 Limited Power Increase

Void.

9.2.1.37A Local Cell Group ID

The Local Cell Group ID represents resources in the Node B, which have been pooled from a capacity point of view.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Local Cell Group ID			Local Cell ID 9.2.1.38	

9.2.1.38 Local Cell ID

The local cell ID represents resources in the Node B that can be used for the configuration of a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Local Cell ID			INTEGER (0...268435455)	

9.2.1.39 Maximum DL Power Capability

This parameter indicates the maximum DL power capability for a local cell within the Node B. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum DL Power Capability			ENUMERATED INTEGER (0...500)	Unit: dBm; Range: 0..50 dBm Stepgranularity: 0.1 dB 0: 0 dBm 1: 0.1 dBm ... 499: 49.9 dBm 500: 50.0 dBm

9.2.1.40 Maximum Transmission Power

The Maximum Transmission Power is the maximum power for all downlink channels added together, that is allowed to be used simultaneously in a cell. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Transmission Power			ENUMERATED INTEGER (0..500)	Unit: dBm Range: 0..50 dBm StepGranularity: 0.1 dB 0: 0 dBm 1: 0.1 dBm ... 499: 49.9 dBm 500: 50.0 dBm

9.2.1.40A Measurement Availability Indicator

Indicates if the measurement is available or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Availability Indicator			ENUMERATED (measurement available, measurement not available)	

Void.

9.2.1.40B Measurement Change Time

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Scale >millisecond				
>>Measurement Change Time Value	M		INTEGER (1..6000...)	Unit: ms Range: 10..60000 ms Step: 10 ms

9.2.1.41 Measurement Filter Coefficient

The Measurement Filter Coefficient determines the amount of filtering to be applied for measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Filter Coefficient			ENUMERATED (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 17, 19,...)	

9.2.1.41A Measurement Hysteresis Time

The Measurement Hysteresis Time provides the duration during which a reporting criterion has to be fulfilled for the Measurement Reporting procedure to be triggered.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Scale				
>millisecond				
>>Measurement Hysteresis Time Value	M		INTEGER (1..6000,...)	Unit: ms Range: 10..60000 ms Step: 10 ms

9.2.1.42 Measurement ID

The Measurement ID uniquely identifies any measurement per (Node B- or eCCommunication) eControl pPort.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement ID			IntegerINTEGER (0..-2^20-1)	

9.2.1.43 Measurement Increase/Decrease Threshold

The Measurement Increase/Decrease Threshold defines the threshold that shall trigger Event C or D.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Measurement Increase/Decrease Threshold</i>				
->>Received Total Wide Band Power				
>>Received <i>T</i> total <i>W</i> wide <i>B</i> band <i>P</i> power	M		INTEGER_(0..620)	Unit: dB Range: 0..62 dB Step: 0.1 0: 0 dB 1: 0.1 dB 2: 0.2 dB ... 620: 62dB
->>Transmitted Carrier Power				
>>Transmitted Carrier Power	M		INTEGER_(0..100)	According to mapping in [22] and [23]
->>Acknowledged PRACH Preambles				FDD only
>>Acknowledged PRACH Preambles	M		INTEGER (0..240,...)	According to mapping in [22]
->>UL Timeslot ISCP				TDD only
>>UL Timeslot ISCP	M		INTEGER_(0..126)	Unit: dB Range: 0..63 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 126: 63 dB
->>SIR				
>>SIR	M		INTEGER_(0..62)	Unit: dB Range: 0..31 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 62: 31dB
->>SIR Error				FDD only
>>SIR Error	M		INTEGER_(0..124)	Unit: dB Range: 0..62 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 124: 62 dB, [FDD only]
->>Transmitted Code Power				
>>Transmitted Code Power	M		INTEGER (0..112,...)	Unit: dB Range: 0..56 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 112: 56 dB
->>RSCP				TDD only
>>RSCP	M		INTEGER_(0..126)	Unit: dB Range: 0..63 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 126: 63 dB
->>Round Trip Time				FDD only
>>Round Trip Time	M		INTEGER_(0..32766)	Unit: chips Range: 0 .. 2047.875 chips Step: 0.625 0: 0 chips 1: 0.0625 chips 2: 0.1250 chips ...

				32766: 2047.875 chips
->>Acknowledged PCPCH Access Preambles				FDD only
>>Acknowledged PCPCH Access Preambles	M		INTEGER_(0..15,...)	According to mapping in [22]
->>Detected PCPCH Access Preambles				FDD only
>>Detected PCPCH Access Preambles	M		INTEGER (0..240,...)	According to mapping in [22]

9.2.1.44 Measurement Threshold

The Measurement Threshold defines which threshold that shall trigger Event A, B, E or F.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Measurement Threshold				
->>Received Total Wide Band Power				
>>Received T_{total} W_{wide} B_{band} P_{power}	M		INTEGER_(0..621)	According to mapping in [22] and [23]
->>Transmitted Carrier Power				
>>Transmitted Carrier Power	M		INTEGER_(0..100)	According to mapping in [22] and [23]
->>Acknowledged PRACH Preambles				FDD only
>>Acknowledged PRACH Preambles	M		INTEGER (0..240,...)	According to mapping in [22]
->>UL Timeslot ISCP				TDD only
>>UL Timeslot ISCP	M		INTEGER_(0..127)	According to mapping in [23]
->>SIR				
>>SIR	M		INTEGER_(0..63)	According to mapping in [22] and [23]
->>SIR Error				FDD only
>>SIR Error	M		INTEGER_(0..125)	According to mapping in [22]
->>Transmitted Code Power				
>>Transmitted Code Power	M		INTEGER_(0..127)	According to mapping in [22] and [23]
->>RSCP				TDD only
>>RSCP	M		INTEGER_(0..127)	According to mapping in [23]
->>Rx Timing Deviation				TDD only
>>Rx Timing Deviation	-M		INTEGER_(0..8191)	According to mapping in [23]
->>Round Trip Time				FDD only
>>Round Trip Time	M		INTEGER_(0..32767)	According to mapping in [22]
->>Acknowledged PCPCH Access Preambles				FDD only
>>Acknowledged PCPCH Access Preambles	M		INTEGER_(0..15,...)	According to mapping in [22]
->>Detected PCPCH Access Preambles				FDD only
>>Detected PCPCH Access Preambles	M		INTEGER (0..240,...)	According to mapping in [22]

9.2.1.45 Message Discriminator

This field is used to discriminate between Dedicated NBAP and Common NBAP messages.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Message Discriminator			ENUMERATED_ (Common, Dedicated)	

9.2.1.45A Message Structure

The *Message Structure* IE gives information for each level with assigned criticality in an hierarchical message structure from top level down to the lowest level above the reported level for the occurred error (reported in the *Information Element Criticality Diagnostics* IE).

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message structure		1 to <maxnooff levels>		The first repetition of the <i>Message Structure</i> IE corresponds to the top level of the message. The last repetition of the <i>Message Structure</i> IE corresponds to the level above the reported level for the occurred error of the message.	GLOBAL	ignore
>IE ID	M		INTEGER (0..65535)	The IE ID of this level's IE containing the not understood or missing IE.	!	
>Repetition Number	O		INTEGER (1..256)	The <i>Repetition Number</i> IE gives, if applicable, the number of occurrences of this level's reported IE up to and including the occurrence containing the not understood or missing IE. Note: All the counted occurrences of the reported IE must have the same topdown hierarchical message structure of IEs with assigned criticality above them.	!	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Message Structure		1..<maxnooflevels>		The first repetition of the Message Structure IE corresponds to the top level of the message. The last repetition of the Message Structure IE corresponds to the level above the reported level for the occurred error of the message.
>IE ID	M		INTEGER (0..65535)	The IE ID of this level's IE containing the not understood or missing IE.
>Repetition Number	O		INTEGER (1..256)	The Repetition Number IE gives, if applicable, the number of occurrences of this level's reported IE up to and including the occurrence containing the not understood or missing IE. Note: All the counted occurrences of the reported IE must have the same topdown hierachical message structure of IEs with assigned criticality above them.

Range bBound	Explanation
Maxnooflevels/maxnooflevels	Maximum no-number of message levels to report. The value for maxnooflevels is 256.

9.2.1.46 Message Type

The Message Type uniquely identifies the message being sent.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Procedure ID	M	<u>1</u>		
>Procedure Code	M		INTEGER (0..255)ENUMERATED { COMMON, TRANSPORTCHANNEL, SETUP, COMMON, TRANSPORTCHANNEL, RECONFIGURATION, COMMON, TRANSPORTCHANNEL, DELETION, BLOCKRESOURCE, UNBLOCKRESOURCE, AUDITREQUIRED, AUDIT, COMMON, MEASUREMENTINITIATION, COMMON, MEASUREMENTREPORTING, COMMON, MEASUREMENTTERMINATION, COMMON, MEASUREMENTFAILURE, CELLSETUP, CELLRECONFIGURATION, CELLDELETION, RESOURCESTATUSINDICATION, SYSTEMINFORMATIONUPDATE, RLSETUP, RLADDITION, SYNCHRONISEDRLRECONFIGURATION, PREPARATION, SYNCHRONISEDRLRECONFIGURATION, SYNCHRONISEDRLRECONFIGURATION, CANCELLATION, UNSYNCHRONISEDRLRECONFIGURATION	"0" = Audit "1" = Audit Required "2" = Block Resource "3" = Cell Deletion "4" = Cell Reconfiguration "5" = Cell Setup "6" = Common Measurement Failure "7" = Common Measurement Initiation "8" = Common Measurement Report "9" = Common Measurement Termination "10" = Common Transport Channel Deletion "11" = Common Transport Channel Reconfigure "12" = Common Transport Channel Setup "13" = Reset "14" = Compressed Mode Command "16" = Dedicated Measurement Failure "17" = Dedicated Measurement Initiation "18" = Dedicated Measurement Report "19" = Dedicated Measurement Termination "20" = Downlink Power Control "21" = Error Indication (For Dedicated Procedures) "23" = Radio Link Addition "24" = Radio Link Deletion "25" = Radio Link Failure "26" = Radio Link Restoration "27" = Radio Link Setup "28" = Resource Status Indication "29" = Synchronised Radio Link Reconfiguration Cancellation "30" = Synchronised Radio Link Reconfiguration Commit "31" = Synchronised Radio Link Reconfiguration Preparation "32" = System Information Update "33" = Unblock Resource "34" = Unsynchornised Radio Link Reconfiguration "35" = Error Indication (For Common Procedures) "37" = Physical Shared Channel Reconfiguration "38" = Downlink Power Timeslot Control "39" = Radio Link Preemption

			ION, RL DELETION, DL POWER CONTROL, DL POWER CONTROL, TIMESLOT DEDICATED MEASUREMENT INITIATION, DEDICATED MEASUREMENT REPORTING, DEDICATED MEASUREMENT TERMINATION, DEDICATED MEASUREMENT FAILURE, RL FAILURE, RL RESTORATION, COMPRESSED MODE COMMAND, ERROR INDICATION, PHYSICAL SHARED CHANNEL RECONFIGURATION, RESET, ...)	
>Ddmode	M		ENUMERATED (FDD, TDD, FDD, Common, ...)	Common = common to FDD and TDD.
Type of Message	M		ENUMERATED (Initiating Message, Successful Outcome, Unsuccessful Outcome, Outcome)	

9.2.1.46A Minimum DL Power Capability

This parameter indicates the minimum DL power capability for a local cell within the Node B. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum DL Power Capability			ENUMERATED INTEGER (0..800)	Unit: dBm, Range: -30 .. +50 dBm Stepgranularity: 0.1 dB 0: -30.0 dBm 1: -29.9 dBm ... 799: 49.9 dBm 800: 50.0 dBm

9.2.1.47 Minimum Spreading Factor

This parameter indicates the minimum spreading factor supported at a cell within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum Spreading Factor			Enumerated ENUMERATED (4, 8, 16, 32, 64, 128, 256, 512)	

9.2.1.47A N_INSYNC_IND

This parameter defines the number of successive in-sync indications after which is used by the Node B for achievement/re-achievement of UL synchronisation on the Uu interface as defined in shall trigger the Radio Link Restore procedure (see also ref. [10] and [21]).

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_INSYNC_IND			Integer INTEGER (1, 2, ..., 256)	

9.2.1.47B N_OUTSYNC_IND

This parameter defines the number of consecutive out-of-sync indications after which the timer T_RLFAILURE shall be started (see also ref. [10] and [21]).

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_OUTSYNC_IND			Integer INTEGER (1, 2, ..., 256)	

9.2.1.48 Node B Communication Context ID

The Node B Communication Context ID is the identifier of the Communication Context in the Node B, it corresponds to the dedicated resources which are necessary for an UE using one or more dedicated channels in a given Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Node B Communication Context ID			INTEGER (0..2 ²⁰ -1)	"2 ²⁰ -1" is a reserved value to indicate all the existing and future Node B Communication Contexts that can be reached by the Communication Control Port (All NBCC).

9.2.1.49 Payload CRC Presence Indicator

This parameter indicates whether FP payload 16 bit CRC is used or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Payload CRC Presence Indicator			ENUMERATED (CRC Included, CRC Not Included, ...)	

9.2.1.49A PICH Power

The *PICH Power* ~~PICH Power~~-IE indicates a power level relative to the [FDD-~~p~~Primary CPICH power] [TDD-~~p~~Primary CCPCH power] configured in a cell.

IE/Group Name	Presence	Range	IE t Type and r Reference	Semantics d Description
PICH Power			EnumeratedINTEGER (-10..+5dB)	Unit: dB Range: -10 .. +5 dB Step: 1dB

9.2.1.50 Puncture Limit

The Puncture ~~l~~Limit limits the amount of puncturing that can be applied in order to minimise the number of dedicated physical channels.

IE/Group Name	Presence	Range	IE t Type and r Reference	Semantics d Description
Puncture l Limit			INTEGER (0..15)	Unit: % Range: 40..100 % Step: 4 0-40% 1: 44 % ... 14: 96% 15-100% means (no puncturing)

9.2.1.50A QE-Selector

The QE-Selector indicates from which source the value for the quality estimate (QE) shall be taken.

IE/Group Name	Presence	Range	IE t Type and r Reference	Semantics d Description
QE-Selector			ENUMERATED_(s Selected, n Non- s Selected)	

9.2.1.51 Report Characteristics

The report characteristics~~s~~, defines how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Report Characteristics				
->>On_Demand			NULL	
->>Periodic				
>>Report Periodicity	M		9.2.1.51aENUMERATED (10ms...1min,...) step 10ms, (1min...1hr,...) step 1min,...	The frequency with which the Node B shall send measurement reports.
->>Event A				
>>Measurement Threshold	M		Measurement Threshold 9.2.1.44	The threshold for which the Node B shall trigger a measurement report.
>>Measurement Hysteresis Time	O		9.2.1.41AENUMERATED (10ms...1min,...) step 10ms,...	
->>Event B				
>>Measurement Threshold	M		Measurement Threshold 9.2.1.44	The threshold for which the Node B shall trigger a measurement report.
>>Measurement Hysteresis Time	O		9.2.1.41AENUMERATED (10ms...1min,...) step 10ms,...	
->>Event C				
>>Measurement Increase/Decrease Threshold	M		Measurement Increase/Decrease Threshold 9.2.1.43	
>>Measurement Change Time	M		9.2.1.40BENUMERATED (10ms...1min,...) step 10ms,...	The time the measurement entity shall rise on (in ms), in order to trigger a measurement report.
->>Event D				
>>Measurement Increase/Decrease Threshold	M		Measurement Increase/Decrease Threshold 9.2.1.43	
>>Measurement Change Time	M		9.2.1.40BENUMERATED (10ms...1min,...) step 10ms,...	The time the measurement entity shall fall (in ms), in order to trigger a measurement report.
->>Event E				
>>Measurement Threshold 1	M		Measurement Threshold 9.2.1.44	
>>Measurement Threshold 2	O		Measurement Threshold 9.2.1.44	
>>Measurement Hysteresis Time	O		9.2.1.41AENUMERATED (10ms...1min,...) step 10ms,...	The hysteresis time in ms
>>Report Periodicity	O		9.2.1.51aENUMERATED (10ms...1min,...) step 10ms, (1min...1hr,...) step 1min,...	The frequency with which the Node B shall send measurement reports.
->>Event F				
>>Measurement Threshold 1	M		Measurement Threshold 9.2.1.44	

>>Measurement Threshold 2	O		Measurement Threshold 9.2.1.44	
>>Measurement Hysteresis Time	O		9.2.1.41aENUMERATED (10ms...1min,...) step 10ms,...	The hysteresis time in ms
>Report Periodicity	O		9.2.1.51aENUMERATED (10ms...1min,...) step 10ms, (1min...1hr,...) step 1min,...	The frequency with which the Node B shall send measurement reports.

9.2.1.51a Report Periodicity

The Report Periodicity defines the frequency at which the Node B shall send measurement reports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Report Periodicity Scale				
>millisecond				
>>Report Periodicity Value	M		INTEGER (1..6000,...)	Unit: ms Range: 10..60000 ms Step: 10 ms
>minute				
>>Report Periodicity Value	M		INTEGER (1..60,...)	Unit: min Range: 1..60 min Step: 1 min

9.2.1.52 Resource Operational State

The Resource Operational State is used to indicate the current operational state of the associated resource following a Node B failure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Resource Operational State			ENUMERATED_(Enabled, Disabled)	When a resource is marked as disabled, then its child resources are implicitly disabled. Cell Resource hierarchy can be referred to [6].

9.2.1.52A Retention Priority

Void.

9.2.1.53 RL ID

The RL ID is the unique identifier for one RL associated with a UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL ID			INTEGER (0..31)	

9.2.1.53A SFN

System Frame Number of the cell, see ref. [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SFN			Integer-INTEGER (0..4095)	

9.2.1.53B Segment Type

Segment type as defined in [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Segment Type			Enumerated-ENUMERATED (First segment, First segment short, Subsequent segment, Last segment, Last segment short, Complete SIB, Complete SIB short, ...)	

9.2.1.54 SIB Deletion Indicator

Void.

9.2.1.55 SIB Originator

Indicates if the Node B shall fill in the SIB information or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SIB Originator			Enumerated-ENUMERATED (Node B, CRNC, ...)	

9.2.1.56 Shutdown Timer

The shutdown timer shall indicate the length of time available to the CRNC to perform the block of a resource when a Normal priority block is requested.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Shutdown Timer			INTEGER (1..3600);INTEGER(1..3600)	Unit: Value in seconds

9.2.1.56A T_RLFAILURE

The Radio Link Failure procedure shall be triggered after a period of time T_RLFAILURE has elapsed with a persisting out-of-sync indication (see also ref. [10] and [21]).

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T_RLFAILURE			ENUMERATED_INTEGER (0, 0.1, 0.2, ..., 25.5)	Unit: in seconds Range: 0 .. 25.5 s Step: 0.1 s

9.2.1.56B Start Of Audit Sequence Indicator

Indicates if the AUDIT REQUEST message initiates a new audit sequence or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Start Of Audit Sequence Indicator			ENUMERATED_ (sStart oOf aAudit sSequence, nNot sStart oOf aAudit sSequence)	

9.2.1.57 TFCI Presence

The TFCI Presence parameter indicates whether the TFCI shall be included. In TDD, if it is present in the timeslot, it will be included within the first Channelization code listed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI presence			ENUMERATED (Present, nNot pPresent)	

9.2.1.58 TFCS (Transport Format Combination Set)

The Transport Format Combination Set is defined as a set of Transport Format Combinations on a Coded Composite Transport Channel. It is the allowed Transport Format Combinations of the corresponding Transport Channels. The DL Transport Format Combination Set is applicable for DL Transport Channels.

[FDD - Where the UE is assigned access to one or more DSCH transport channels then the UTRAN has the choice of two methods for signalling the mapping between TFCI(field 2) values and the corresponding TFC:

Method #1 - TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given transport format combination (value of CTFC(field2)). The CTFC(field2) value specified in the first group applies for all values of TFCI(field 2) between 0 and the specified 'Max TFCI(field2) value'. The CTFC(field2) value specified in the second group applies for all values of TFCI(field 2) between the 'Max TFCI(field2) value' specified in the last group plus one and the specified 'Max TFCI(field2) value' in the second group. – The process continues in the same way for the following groups with the TFCI(field 2) value used by the UE in constructing its mapping table starting at the largest value reached in the previous group plus one.

Method #2 - Explicit

The mapping between TFCI(field 2) value and CTFC(field2) is spelt out explicitly for each value of TFCI (field2)]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
CHOICE <i>DSCH</i> >No split in TFCI				This choice is made if : a) The TFCS refers to the <i>Uplink</i> . OR b) The mode is FDD and none of the Radio Links of the concerned UE are assigned any DSCH transport channels. OR c) The mode is TDD.
>>TFCS		1..<maxno ofTFCs>+1 to <maxno of TFCs>		The first instance of the parameter corresponds to TFCI zero, the second to 1 and so on.
>>>CTFC	M		9.2.1.18AINTEGER(0..MaxCTFC)	See Note 1.
>>>CHOICE <i>Gain Factors</i> >>>>Signalled <i>Gain Factors</i>	C-PhysChan			
>>>>>CHOICE <i>Mode</i>	M			
>>>>>>FDD				
>>>>>>Gain Factor β_c	M		Integer-INTEGER (0..15)	For UL DPCCH or control part of PRACH or control part of PCPCH in FDD; mapping in accordance to [9].
>>>>>>Gain Factor β_d	M		Integer-INTEGER (0..15)	For UL DPDCH or data part of PRACH or data part of PCPCH in FDD; mapping in accordance to [9].
>>>>>>TDD				
>>>>>>Gain Factor β	M		Integer-INTEGER (0..15)	For UL DPCH in TDD; mapping in accordance to [20].
>>>>>Reference TFC nr	O		Integer-INTEGER (0..3)	If this TFC is a reference TFC, this IE indicates the reference number.
>>>>>>Computed <i>Gain Factors</i>				
>>>>>>Reference TFC nr	M		Integer-INTEGER (0..3)	Indicates the reference TFC to be used to calculate the gain factors for this TFC.
>There is a split in the TFCI				This choice is made if : a) The TFCS refers to the <i>Downlink</i> . AND b) The mode is FDD and one of the Radio Links of the concerned UE is assigned one or more DSCH transport channels.
>>>>Transport <i>Format Combination</i> _DCH		1..<maxTFCI 1 Combs>+1 to <MaxTFCI 1 Combs>		The first instance of the parameter <i>Transport Format Combination</i> _DCH corresponds to TFCI (field 1) = 0, the second to TFCI (field 1) = 1 and so on.
>>>CTFC(field1)	M		9.2.1.18AInteger(0..MaxCTFC)	See Note 1.
>>Choice CHOICE				

<i>Signalling Mmethod</i>				
<i>>>>>TFCI Rrange</i>				
<i>>>>>>>TFC mMapping eOn DSCH</i>		<i>1..<maxNo TFCIGroups></i>		
<i>>>>>Max TFCI(field2) Vvalue</i>	M		<i>IntegerINTEGER (1..1023)</i>	This is the Maximum value in the range of <i>TFCI(field2)</i> values for which the specified CTFC(field2) applies.
<i>>>>>CTFC(field2)</i>	M		<i>9.2.1.18AInteger(0..MaxCTFC)</i>	<i>See Note 1.</i>
<i>>>>>>Explicit</i>				
<i>>>>>>>Transport Fformat eCombination_ DSCH</i>		<i>1..<maxTF CI 2 Combs></i>		The first instance of the parameter <i>Transport fFormat eCombination_ DSCH</i> corresponds to TFCI (field2) = 0, the second to TFCI (field 2) = -1 and so on.
<i>>>>>>CTFC(field2)</i>	M		<i>9.2.1.18AInteger(0..MaxCTFC)</i>	<i>See Note 1.</i>

Condition	Explanation
PhysChan	The IE shall be present if the TFCS concerns a UL DPCH or PRACH channel [FDD – or PCPCH channel].

Range bBound	Explanation
<i>maxnoofTFCsMaxnoofTFCs</i>	The maximum number of Transport Format Combinations.
<i>maxTFCI_1_CombsMaxTFCI_1_Combs</i>	Maximum number of TFCI (field 1) combinations (given by 2 raised to the power of the length of the TFCI (field 1))
<i>maxTFCI_2_CombsMaxTFCI_2_Combs</i>	Maximum number of TFCI (field 2) combinations (given by 2 raised to the power of the length of the TFCI (field 2))
<i>maxNoTFCIGroupsMaxNoTFCIGroups</i>	Maximum number of groups, each group described in terms of a range of TFCI(field 2) values for which a single value of CTFC(field2) applies
<i>MaxCTFC</i>	Maximum number of the CTFC value is calculated according to the following: $\sum_{i=1}^L (L_i - 1)P_i$ with the notation according to ref. [18].

Note 1:

The CTFC is an integer number calculated in accordance with [18], subclause 14.10. Regarding the channel ordering, for all transport channels, ‘TrCH1’ corresponds to the transport channel having the lowest transport channel identity among all configured transport channels on this CCTrCH. ‘TrCH2’ corresponds to the transport channel having the next lowest transport channel identity, and so on.

9.2.1.59 Transport Format Set

The Transport Format Set is defined as the set of Transport Formats associated to a Transport Channel, e.g. DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Dynamic Transport Format Information		$1..<maxTFcount>4$ $<maxTFcount>$		The first instance of the parameter corresponds to TFI zero, the second to 1 and so on.
>Number Of Transport Blocks	M		INTEGER (0..512)	
>Transport Block Size	C- Blocks		INTEGER (0..5000)	Unit: Bits
>CHOICE Mode	M			
>>>>TDD				
>>>>>Transmission Time Interval Information	C-TTIdynamic	$1..<maxTTIcount>4$ $<maxTTIcount>$		
>>>>Transmission Time Interval	M		Enumerated ENUMERATED RATED (10, 20, 40, 80,...)	Unit: ms
Semi-Static Transport Format Information		1		
>Transmission Time Interval	M		ENUMERATED (10, 20, 40, 80, dynamic,...)	Unit: ms Value "dynamic" for TDD only
>Type Of Channel Coding	M		ENUMERATED_ (No codingTDD, Convolutional, Turbo, ...)	[FDD - The value "No codingTDD" shall be treated as logical error if received]
>Coding Rate	C- Coding		ENUMERATED (1/2, 1/3,...)	
>Rate Matching Attribute	M		INTEGER (1..maxRM)	
>CRC Size	M		ENUMERATED (0, 8, 12, 16, 24,...)	
>CHOICE Mode	M			
>>>>TDD				
>>>>2 nd Interleaving Mode	M		Enumerated ENUMERATED RATED_ (Frame related, Timeslot related, ...)	

Condition	Explanation
Blocks	The IE shall be present if the <i>Number Of Transport Blocks</i> IE is set to a value greater than 0.
Coding	The IE shall be present if the <i>Type Of Channel Coding</i> IE is set to "Convolutional" or "Turbo".
TTIdynamic	The IE shall be present if the <i>Transmission Time Interval</i> IE in the <i>Semi-Static Transport Format Information</i> IE is set to "dynamic".

Range Bound	Explanation
$maxTFcount$ MaxTFcount	Maximum number of different <i>Transport Formats</i> that can be included in the <i>Transport Format Set</i> for one transport channel.
$MmaxRM$	Maximum number that could be set as rate matching attribute for a transport channel.
$MmaxTTIcount$	The amount of different <i>TTIs</i> that are possible for that <i>Transport Format</i> .

9.2.1.60 ToAWE

TOAWE is the window endpoint. DL data frames are expected to be received before this window endpoint. TOAWE is defined with a positive value relative Latest Time of Arrival (LTOA). A data frame arriving after TOAWE gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWE			INTEGER (0..2559)	Unit: ms.

9.2.1.61 ToAWS

TOAWS is the window startpoint. DL data frames are expected to be received after this window startpoint. TOAWS is defined with a positive value relative Time of Arrival Window Endpoint (TOAWE). A data frame arriving before TOAWS gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWS			INTEGER (0..1279)	Unit: ms.

9.2.1.62 Transaction ID

The transaction ID is used to associate all the messages belonging to the same procedure. Messages belonging to the same procedure shall use the same transaction ID.

The transaction ID is determined by the initiating peer of a procedure. For common procedures the transaction ID shall uniquely identify a procedure within all ongoing parallel procedures initiated by one protocol peer, using the same procedure code and signalled over the same Node B Control Port. For dedicated procedures the transaction ID shall uniquely identify a procedure within all ongoing parallel procedures initiated by one protocol peer, using the same procedure code and initiated towards the same Node B/CRNC context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Transaction ID Length Transaction ID			CHOICE INTEGER(0..127) or INTEGER (0..32767)	The Transaction ID shall be interpreted for its integer value, not for the type of encoding ("short" or "long").
>Short				
>>Transaction ID Value	M		INTEGER (0..127)	
>Long				
>>Transaction ID Value	M		INTEGER (0..32767)	

9.2.1.62A Transport Bearer Request Indicator

Indicates whether a new transport bearer needs to be established for carrying the ~~concerning~~concerned transport channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Request Indicator			ENUMERATED_(Bearer Requested, Bearer Not Requested, ...)	

9.2.1.63 Transport Layer Address

The Transport Layer Address defines the transport address of the Node B. For details on the Transport Address used see ref. [2].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Layer Address			Bit string BIT STRING (1..160, ...)	

9.2.1.64 TSTD Indicator

Indicates if TSTD shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSTD Indicator			ENUMERATED_(active, inactive)	

9.2.1.65 UARFCN

Designates the central frequency of the channel number.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
UARFCN			INTEGER (0..16383, ...)	Unit: MHz Range: corresponds to 0..0Hz..3276.6_MHz Step: 0.2 MHz (subclause 5.4.3 in [14] and [15])

9.2.1.65A UL Capacity Credit

The capacity credit indicates to the CRNC the Uplink capacity of a Local Cell or a Local Cell Group.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Capacity Credit			INTEGER (0..65535)	

9.2.1.66 UL FP Mode

This parameter defines if normal or silent mode of the Frame Protocol shall be used for the UL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL FP Mode			-ENUMERATED (Normal, Silent, ...)	

9.2.1.67 UL interference level

Void.

9.2.2 FDD specific parameters

9.2.2.A Active Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence activation. For details see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CM Configuration Change CFN	M		CFN 9.2.1.7	
Transmission Gap Pattern Sequence Status		$0..<maxTGPS>0$ to $<MaxTGPS>$		
>TGPS Identifier	M		Integer INTEGER (1..<MmaxTGPS>)	If the group is not present, none of the pattern sequences are activated. References an already defined sequence.
>TGPRC	M		Integer INTEGER (0..511)	The number of transmission gap patterns within the Transmission Gap Pattern Sequence. "0"=Infinity
>TGCFN	M		CFN 9.2.1.7	Connection Frame Number of the first frame of the first pattern 1 within the Transmission Gap Pattern Sequence.

Range Bound	Explanation
$maxTGPS$ / $MaxTGPS$	Maximum number of active pattern sequences. Value 6.

9.2.2.B Adjustment Period

The Adjustment Period IE defines the period to be used for power balancing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Period			INTEGER (1..256)	Unit: Frames

9.2.2.C Adjustment Ratio

The Adjustment Ratio IE (Radj) defines the convergence rate used for the associated Adjustment Period.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Ratio			INTEGER (0..100)	Unit: None Range: 0..1 Step: 0.01 The Adjustment Ratio is given with a granularity of 0.01 0 -> 0.00 1 -> 0.01 ... 100 -> 1.00

9.2.2.D AICH Power

The *AICH Power* AICH Power IE indicates a power level (measured as the power per transmitted acquisition indicator when several AIs are transmitted in parallel) relative to the primary CPICH power configured in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AICH Power			INTEGER (-22..+5)	Unit: Offset in dB Range: -22 .. +5 dB Step: 1 dB

9.2.2.1 AICH Transmission Timing

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AICH Transmission Timing			ENUMERATED (0, 1)	See parameter AICH_Transmission_Timing in ref. [7].

9.2.2.1A AP Preamble Signature

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AP Preamble Signature			INTEGER (0..15)	Described in ref. [9]

9.2.2.1B AP Sub Channel Number

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AP Sub Channel Number			INTEGER (0..11)	Described in ref. [10]

9.2.2.1C CD Sub Channel Numbers

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CD Sub Channel Numbers			BIT STRING (12)	Each bit indicates availability for a subchannel, where the subchannels are numbered "subchannel 0" to "subchannel 11". The value 1 of a bit indicates that the corresponding subchannel is available and the value 0 indicates that it is not available. The order of bits is to be interpreted according to subclause 9.3.4. See also [10].

9.2.2.1D Channel Assignment Indication

The Channel Assignment Indication indicates whether CA is active or inactive. When CA is active, CPCH is in Versatile Channel Assignment Method (VCAM) mode and when CA is inactive, CPCH is in UE Channel Selection Method (UCSM) mode. In VCAM mode (CA active), CA message in CD/CA-ICH shall be sent.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Channel Assignment Indication			ENUMERATED (CA Active, CA Inactive)	

9.2.2.2 Chip Offset

The Chip Offset is defined as the radio timing offset inside a radio frame. The Chip offset is used as offset for the DL DPCH relative to the Primary CPICH timing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Chip Offset			INTEGER (0..38399)	Unit: Chips

9.2.2.2A Closed Loop Timing Adjustment Mode

Indicates when the phase/amplitude adjustment is performed in the DL in relation to the receipt of the UL feedback command in case of closed loop mode transmit diversity on DPCH.

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Closed Loop Timing Adjustment Mode			ENUMERATED (Offset1, Offset2, ...)	According to ref. [10] subclause 7.1: -"Offset1" = slot(j+1)mod15 -"Offset2" = slot(j+2)mod15

9.2.2.3 Common Channels Capacity Consumption Law

Void

9.2.2.3A Compressed Mode Deactivation Flag

The Compressed Mode Deactivation Flag indicates whether Compressed Mode shall be deactivated or not in the new RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Compressed Mode Deactivation Flag			ENUMERATED (Deactivate, Maintain Active)	

9.2.2.4 Compressed Mode Method

Void.

9.2.2.4A CPCH Allowed Total Rate

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CPCH Allowed Total Rate			ENUMERATED (15, 30, 60, 120, 240, 480, 960, 1920, 2880, 3840, 4800, 5760,...)	Channel Symbol Rate (Unit: kbps)

9.2.2.4B CPCH Scrambling Code Number

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
CPCH Scrambling Code Number			INTEGER (0..79)	Described in ref. [9]

9.2.2.4C CPCH UL DPCCH Slot Format

Indicates the slot format used in UL CPCH message control part, accordingly to ref. [7]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
CPCH UL DPCCH Slot Format			INTEGER (0..2,...)	

9.2.2.4D DCH FDD Information

The *DCH FDD Information* IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
DCH FDD Information		1..<maxno of DCHs> to <maxno of DCHs>		
>Payload CRC Presence Indicator	M		9.2.1.49	
>UL FP Mode	M		9.2.1.66	
>ToAWS	M		9.2.1.61	
>ToAWE	M		9.2.1.60	
>DCH Specific Info		1..<maxno of DCHs>		
>>DCH ID	M		9.2.1.20	
>>Transport Format Set	M		9.2.1.59	For UL
>>Transport Format Set	M		9.2.1.59	For DL
>>Allocation/Retention Priority	M		9.2.1.1A	
>>Frame Handling Priority	M		9.2.1.30	
>>QE-Selector	M		9.2.1.50A	

Range Bound	Explanation
Mmaxno of DCHs	Maximum number of DCHs for one UE.

9.2.2.4E DCHs FDD To Modify

The *DCHs FDD To Modify* IE provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCHs FDD To Modify		1..<maxno ofDCHs>		
>UL FP Mode	O		9.2.1.66	
>ToAWS	O		9.2.1.61	
>ToAWE	O		9.2.1.60	
>Transport Bearer Request Indicator	M		9.2.1.62A	
>DCH Specific Info		1..<maxno ofDCHs>		
>>DCH ID	M		9.2.1.20	
>>Transport Format Set	O		9.2.1.59	For the UL.
>>Transport Format Set	O		9.2.1.59	For the DL.
>>Allocation/Retention Priority	O		9.2.1.1A	
>>Frame Handling Priority	O		9.2.1.20	

Range Bound	Explanation
MmaxnoofDCHs	Maximum number of DCHs for one UE.

9.2.2.5 D-Field Length

Void.

9.2.2.6 Dedicated Channels Capacity Consumption Law

Void

9.2.2.7 Diversity Control Field

Void.

9.2.2.8 Diversity Indication

Void.

9.2.2.9 Diversity mode

Define the diversity mode to be applied.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Diversity Mode			ENUMERATED_(None, STTD, Closed loop mode 1, Closed loop mode_2, ...)	

9.2.2.10 DL DPCH Slot Format

Indicates the slot format used in DPCH in DL, accordingly to ref. [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL DPCH Slot Format			INTEGER (0..16,...)	

9.2.2.11 DL frame type

Void.

9.2.2.12 DL or Global Capacity Credit

Void

9.2.2.12A DL_power_averaging_window_size

The *DL_power_averaging_window_size* IE defines the window size when Limited Power Increase is used [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL_power_averaging_window_size			INTEGER (1..60)	Unit: 1-60 inner loop power adjustments; Range: 1..60 Step-size: 1 adjustment

9.2.2.13 DL Scrambling Code

DL scrambling code to be used by the RL. One cell may have multiple DL scrambling codes available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Scrambling Code			INTEGER (0..15)	"0" = Primary scrambling code of the cell "1".."15" = Secondary scrambling code

9.2.2.13A DL TPC P_{pattern 01} C_{count}

The *DL TPC P_{pattern 01} C_{count}* IE contains the value of the parameter n, which is used for determining the DL TPC pattern on Radio Links marked with "first RLS" by the *First RLS indicator* IE before UL synchronisation is achieved.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL TPC P _{pattern 01} C _{count}			INTEGER(0..30,...)	

9.2.2.13B DSCH FDD Information

The *DSCH FDD Information* IE provides information for DSCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
DSCH FDD Information		<i>1..<maxno of DSCHs> 1 to <maxno of DSCHs></i>		
>DSCH ID	M		9.2.1.27	
>Transport Format Set	M		9.2.1.59	For DSCH
>Allocation/Retention Priority	M		9.2.1.1A	
>Frame Handling Priority	M		9.2.1.30	
>ToAWS	M		9.2.1.61	
>ToAWE	M		9.2.1.60	

Range Bound	Explanation
<i>Mmaxno of DSCHs</i>	Maximum number of DSCHs for one UE.

9.2.2.14 FDD DL Channelisation Code Number

The DL Channelisation Code Number indicates the DL Channelisation Code number for a specific DL physical channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
FDD DL Channelisation Code Number			INTEGER_(0..511)	According to the mapping in [9]. The maximum value is equal to the DL spreading factor - 1.

9.2.2.14A FDD DL Code Information

The *FDD DL Code Information* IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
FDD DL Code Information		<i>1..<maxno of Codes> 1 to <maxno of Codes></i>		
>DL Scrambling Code	M		9.2.2.13	
>FDD DL Channelisation Code Number	M		9.2.2.14	
>Transmission Gap Pattern Sequence Code Information	O		9.2.2.53B	

Range Bound	Explanation
<i>Mmaxno of Codes</i>	Maximum number of DL code information.

9.2.2.15 FDD SCCPCH Offset

The Secondary CCPCH offset is defined as the time offset towards the Primary CCPCH in the cell. The offset is a multiple of 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD SCCPCH Offset			INTEGER_(0..149)	Unit: 0-chip 1- 256-chip 2- 512-chip Range: 0..38144 chips Step: 256 chips See ref. [7]

9.2.2.16 FDD TPC DL Step Size

This parameter indicates step size for the DL power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD TPC Downlink Step Size			ENUMERATED (0.5, 1, 1.5, 2,...)	Unit: dB

9.2.2.16A First RLS Indicator

The *First RLS Indicator* IE indicates if a specific Radio Link and all Radio Links which are part of the same Radio Link Set, shall be considered as the first radio links established towards the UE or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
First RLS Indicator			ENUMERATED (First RLS, Not First RLS)	

9.2.2.17 Gap Period

Void.

9.2.2.18 Gap Position Mode

Void.

9.2.2.18A Limited Power Increase

The parameter is used for a more efficient use of the inner loop DL power control for non real time data.

If the limited power increase is used, the Node B shall use the limited power increase algorithm as specified in [10], subclause 5.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Limited Power Increase			ENUMERATED_(Used, Not Used)	

9.2.2.18B Inner Loop DL PC Status

The *Inner Loop DL PC Status* IE indicates whether inner loop DL control shall be active or inactive for all radio links associated with the context identified by the *Node B Communication Context Id* IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Inner Loop DL PC Status			ENUMERATED_(Active, Inactive)	

9.2.2.19 Max Adjustment Period

Void.

9.2.2.20 Max Adjustment Step

Defines the maximum allowed value for the change of DL power level during a certain number of slots that can be utilised by the downlink power balancing algorithm. *Max Adjustment Step* IE defines a time period, in terms of number of slots, in which the accumulated power adjustment shall be maximum 1dB. This value does not include the DL inner loop PC adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Adjustment Step			INTEGER (1..10)	Unit: Slots

9.2.2.20A Max Number Of PCPCHes

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Number Of PCPCHes			INTEGER (1..64,...)	

9.2.2.21 Maximum Number Of UL DPDCHs

-Maximum number of uplink DPDCHs to be used during the connection. Needed by the rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Number Of UL DPDCHs			INTEGER (1..6)	

9.2.2.22 Minimum UL Channelisation Code Length

Minimum UL channelisation code length (spreading factor) of a DPDCH which is used during the connection. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Min UL Channelisation Code Length			ENUMERATED (4, 8, 16, 32, 64, 128, 256...)	

9.2.2.23 Multiplexing Position

Multiplexing Position specifies whether fixed or flexible positions of transport channels shall be used in the physical channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Multiplexing Position			ENUMERATED_(Fixed, Flexible)	

9.2.2.23A N_EOT

The N_EOT is defined as number of End of Transmission for release of PCPCH transmission.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
N_EOT			INTEGER (0..8)	Unit: TTI Value "8" is never used in this release.

9.2.2.23B NF_max

The NF_max is defined as maximum number of Frame in a PCPCH message data part.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
NF_max			INTEGER (1..64,...)	

9.2.2.23C N_Start_Message

The N_Start_Message is defined as number of Frames for start message of DL DPDCHeS for a CPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
N_Start_Message			INTEGER (1..8)	

9.2.2.24 Pattern Duration (PD)

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
PD			INTEGER (0..2047, ...)	Frames If the value is set to "0", the Pattern Duration shall be interpreted as 'infinite'

Void.

9.2.2.24A PCP Length

Indicates CPCH power control preamble length.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
PCP Length			ENUMERATED (0, 8)	

9.2.2.25 PDSCH eCode mMapping

This IE indicates the association between each possible value of TFCI (field 2) and the corresponding PDSCH channelisation code(s). There are three fundamentally different ways that the UTRAN must choose between in order to signal the mapping information, these are described below. The signalling capacity consumed by the different methods

will vary depending on the way in which the UTRAN configures usage of the DSCH. A fourth option is also provided which allows the UTRAN to replace individual entries in the TFCI(field 2) to PDSCH code mapping table with new PDSCH code values.

Method #1 - Using code range

The mapping is described in terms of a number of groups, each group associated with a given spreading factor. Each TFCI(field2) value corresponds to a given PDSCH channelisation code or set of PDSCH codes for multi-code. The Node B maps TFCI(field2) values to PDSCH codes in the following way:

- The PDSCH codes used for TFCI(field 2) = 0 are given by the SF of the Code Group 1 (i.e. first instance in *PDSCH eCode mMapping*) and the code numbers between CodeNumber₀ (where CodeNumber₀ = "Start eCode nNumber" of Code Group 1) and CodeNumber₀ + "mMulti-eCode iInfo" - 1.
- This continues with unit increments in the value of TFCI (Field2) mapped to either unit increments in code numbers or groups of contiguous code numbers in case of multi-code, this until "Stop eCode nNumber" is reached:
So the PDSCH codes used for TFCI(field 2) = k (for k > 0 and k < ("Stop eCode nNumber" - "Start eCode nNumber" + 1) DIV k) are given by the SF of the Code Group 1 and the code numbers between CodeNumber_k = CodeNumber_{k-1} + "mMulti-eCode iInfo" and CodeNumber_k + "mMulti-eCode iInfo" - 1.
If "Stop eCode nNumber" = "Start eCode nNumber" + "mMulti-eCode iInfo" - 1 then this is to be interpreted as defining the mapping between the channelisation code(s) and a single TFCI.
- The Node B constructs its mapping table by repeating this process for all the Code Groups in the order they are instantiated in *PDSCH eCode mMapping*. The first TFCI(field 2) value used in each group is the largest TFCI(field 2) value reached in the previous group incremented by one.

Note: This imposes that "Stop eCode nNumber" - "Start eCode nNumber" + 1 is a multiple of the value "mMulti-eCode iInfo" for each instance of *PDSCH eCode mMapping*. Furthermore, in the case where multi-code is not used, then "mMulti-eCode iInfo" = 1 and the process above also applies.

Method #2 - Using TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given PDSCH channelisation code or codes for multicode.

- The set of PDSCH codes specified in the first instance applies for all values of TFCI(field 2) between 0 and the specified "Max TFCI(field2)".
- The process continues in the same way for the following groups with the TFCI(field 2) value starting at the largest value reached in the previous instance incremented by one.
So the set of PDSCH codes specified in a given instance apply for all the values of TFCI(field 2) between the "Max TFCI(field2) value" specified in the previous instance incremented by one and the specified "Max TFCI(field2)" of the considered instance.

A set of PDSCH codes is composed of all the codes between "Code Number" and "Code Number" + "mMulti-eCode iInfo" - 1. So if multi-code is not used, the set of PDSCH codes is reduced to one element indicated by the *Code Number* IE.

Method #3 - Explicit

The mapping between TFCI(field 2) value and PDSCH channelisation code (or a set of PDSCH codes for multicode) is spelt out explicitly for each value of TFCI (field2).

A set of PDSCH codes is composed of all the codes between "Code Number" and "Code Number" + "mMulti-eCode iInfo" - 1. So if multi-code is not used, the set of PDSCH codes is reduced to one element indicated by the *Code Number* IE.

Method #4 - Replace

The "TFCI (field2)" value(s) for which the mapping to PDSCH channelisation code (or a set of PDSCH codes for multicode) is changed are explicitly signalled. Furthermore, the new mapping between TFCI(field 2) value and PDSCH channelisation code(s) is spelt out explicitly for each value of TFCI (field2).

A set of PDSCH codes is composed of all the codes between "Code Number" and "Code Number" + "~~m~~Multi-eCode Info" - 1. So if multi-code is not used, the set of PDSCH codes is reduced to one element indicated by the *Code Number* IE.

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Scrambling Code	M		INTEGER (0..15) 9.2.2.13	Scrambling code on which PDSCH is transmitted. 0 = Primary scrambling code of the cell 1...15 = Secondary scrambling code
CHOICE Signalling Method				
>>Code Range				
>>>PDSCH Code Mapping		1..<Mmax NoCodeGroups>		
>>>Spreading Factor	M		EnumeratedENUMERATED (4, 8, 16, 32, 64, 128, 256...)	
>>>Multi-Code Info	M		IntegerINTEGER (1..16)	
>>>Start Code Number	M		IntegerINTEGER (0..maxCodeNumComp-1)	PDSCH code start, Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>>>Stop Code Number	M		IntegerINTEGER (0..maxCodeNumComp-1)	PDSCH code stop, Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>>TFCI Range				
>>>DSCH Mapping		1..<Mmax NoTFCIGroups>+1		
>>>Max TFCI(field2) Value	M		IntegerINTEGER (1..1023)	This is the maximum value in the range of TFCI(field 2) values for which the specified PDSCH code applies
>>>Spreading Factor	M		EnumeratedENUMERATED (4, 8, 16, 32, 64, 128, 256...)	SF of PDSCH code
>>>Multi-Code Info	M		IntegerINTEGER (1..16)	
>>>Code Number	M		IntegerINTEGER (0..maxCodeNumComp-1)	Code number of PDSCH code. Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>>Explicit				
>>>PDSCH Code		1..<Mmax TFCI_2_Combos>		The first instance of the parameter PDSCH code corresponds to TFCI (field2) = 0, the second to TFCI(field 2) = 1 and so on.
>>>Spreading Factor	M		EnumeratedENUMERATED (4, 8, 16, 32, 64, 128, 256...)	SF of PDSCH code
>>>Multi-Code Info	M		IntegerINTEGER (1..16)	
>>>Code Number	M		IntegerINTEGER (0..maxCodeNumComp-1)	Code number of PDSCH code. Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>>Replace				
>>>Replaced PDSCH Code		1..<maxTFCI 2 Combs>1..<Mmax		

		xTFCI_2_Combs		
>>>TFCI (field2)	M		Integer INTEGER (0..1023)	Value of TFCI(field 2) for which PDSCH code mapping will be changed
>>>Spreading Ffactor	M		Enumerated ENUME RATED (4, 8, 16, 32, 64, 128, 256...)	SF of PDSCH code
>>>Mmulti-Ccode linfo	M		Integer INTEGER (1..16)	
>>>Code Nnumber	M		Integer INTEGER (0..maxCodeNumCo mp-1)	Code number of PDSCH code. Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.

Range Bound	Explanation
maxCodeNumComp MaxCodeNumComp	Maximum number of codes at the defined spreading factor, within the complete code tree.
maxTFCI_2_Combs MaxTFCI_2_Combs	Maximum number of TFCI (field 2) combinations (given by 2 raised to the power of the length of the TFCI field 2)
maxNoTFCIGroups MaxNoTFCIGroups	Maximum number of groups, each group described in terms of a range of TFCI(field 2) values for which a single PDSCH code applies.
maxNoCodeGroups MaxNoCodeGroups	Maximum number of groups, each group described in terms of a range of PDSCH channelisation code values for which a single spreading factor applies.

9.2.2.26 PICH Mode

The number of paging indicators (PIs) in a PICH frame.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
PICH Mode			Enumerated ENUME RATED (18, 36, 72, 144...)	Number of PIs per frame

9.2.2.27 Power Adjustment Type

Defines the characteristic of the power adjustment.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
Power Adjustment Type			ENUMERATED (None, Common, Individual)	

9.2.2.28 Power Control Mode

Void.

9.2.2.29 Power Offset

This IE defines a power offset relative to the Downlink transmission power of a DPDCH or a Secondary CCPCH data field or a DL-DPCCH for CPCH pilot field..

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Offset			INTEGER (0..24)	Unit: dB Range: 0..6 dB Step: 0.25 dB, range 0-6 dB

9.2.2.29A Power_Raise_Limit

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power_Raise_Limit			INTEGER (0..10)	Unit: dB Range: 0..10 dB Step-size: 1 dB

9.2.2.30 Power Resume Mode

Void.

9.2.2.31 Preamble Signature

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Preamble Signatures			BIT STRING (16)	Each bit indicates availability for a signature, where the signatures are numbered "signature 0" up to "signature 15". The value 1 of a bit indicates that the corresponding signature is available and the value 0 that it is not available. The order of bits is to be interpreted according to subclause 9.3.4. See also [9].

9.2.2.32 Preamble Threshold

The IE sets the threshold for preamble detection. The ratio between received preamble power during the preamble period and interference level shall be above this threshold in order to be acknowledged.

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Preamble Threshold			INTEGER (0..72)	Unit: dB Range: 0..-36.0 dB Step1: -35.5 dB 2: -35.0 dB 72: 0.0 dB

9.2.2.33 Primary CPICH Power

The Primary CPICH power is the power that shall be used for transmitting the P-CPICH in a cell. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CPICH Power			Enumerated ENUMERATED (-10..50)	Unit: dBm Granularity: 0.1 dB

9.2.2.34 Primary Scrambling Code

The Primary scrambling code to be used in the cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary Scrambling Code			INTEGER (0..511)	

9.2.2.35 Propagation Delay

The Propagation delay is the one-way propagation delay of the radio signal from the MS to the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Propagation Delay			INTEGER (0..255)	Unit: chips; Range: 0..765 chips; Step size is 3 chips; 0=0 chips; 1=3 chips, ...

9.2.2.36 QE-Selector

Void.

9.2.2.37 RACH Slot Format

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RACH Slot Format			ENUMERATED (0..3, ...)	See ref. [7].

9.2.2.38 RACH Sub Channel Numbers

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RACH Sub Channel Numbers			BIT STRING (12)	Each bit indicates availability for a subchannel, where the subchannels are numbered "subchannel 0" to "subchannel 11". The value 1 of a bit indicates that the corresponding subchannel is available and the value 0 indicates that it is not available. The order of bits is to be interpreted according to subclause 9.3.4.

9.2.2.39 RL Set ID

The RL Set ID uniquely identifies one RL Set within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL Set ID			INTEGER (0..31)	

9.2.2.39A Received T_{total} W_{wide} B_{band} P_{power}

The Received total wide band power indicates the UL interference at a certain cell under CRNC, see ref. [4].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Received T_{total} W_{wide} B_{band} P_{power}			INTEGER_(0..621)	According to mapping in [22].

9.2.2.40 S-Field Length

The UE uses the S Field of the UL DPCCH slot to send the SS DT Cell ID to the network.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S Field Length			ENUMERATED (1, 2,...)	

9.2.2.41 Scrambling Code Change

Void.

9.2.2.42 Scrambling Code Number

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Scrambling Code Word Number			INTEGER (0..15)	Identification of scrambling code see ref. [9].

9.2.2.43 Secondary CCPCH Slot Format

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Secondary CCPCH Slot Format			INTEGER_(0..17,...)	

9.2.2.44 SS DT Cell Identity

The SS DT Cell ID is a temporary ID for SS DT assigned to a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SS DT Cell Identity			ENUMERATED (a, b,..., h)	

9.2.2.45 SS DT Cell ID Length

The SS DT Cell ID Length parameter shows the length of the SS DT Cell ID.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell ID Length			ENUMERATED_(Short, Medium, Long)	

9.2.2.46 SSdT Support Indicator

The SSdT Support Indicator indicates whether a RL supports SSdT or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SSdT Support Indicator			ENUMERATED (SSdT Supported, SSdT Not Supported).	

9.2.2.47 SSdT Indication

The SSdT Indication indicates whether SSdT is in use by the UE or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SSdT Indication			ENUMERATED (SSdT Active in the UE, SSdT Not Active in the UE)	

9.2.2.48 STTD Indicator

Indicates if STTD shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
STTD Indicator			ENUMERATED (active, inactive)	

9.2.2.49 T Cell

Timing delay used for defining start of SCH, CPICH and the DL scrambling code(s) in a cell relative BFN. Resolution 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T Cell			ENUMERATED (0, 1, ..., 9)	Unit: 0 chip Step: 256 chips Range: 0..2304 chips See ref. [17]

9.2.2.49A TFCI2 Bearer Information Response

The *TFCI2 Bearer Information Response* IE provides information for TFCI2 bearer that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
Binding ID	M		9.2.1.4	
Transport Layer Address	M		9.2.1.63	

9.2.2.50 TFCI *s*Signalling *m*Mode

This parameter indicates if the normal or split mode is used for the TFCI. In the event that the split mode is to be used then the IE indicates whether the split is "Hard" or "Logical", and in the event that the split is "Logical" the IE indicates the number of bits in TFCI (field 2).

IE/Group Name	Presence	Range	IE <i>t</i> Type and <i>r</i> Reference	Semantics <i>d</i> Description
TFCI <i>s</i> Signalling <i>e</i> Option	M		ENUMERATED (Normal, Split)	"Normal": meaning no split in the TFCI field (either "Logical" or "Hard") "Split": meaning there is a split in the TFCI field (either "Logical" or "Hard")
Split <i>t</i> Type	C-IfSplit		Enumerated ENUMERATED (Hard, Logical)	"Hard": meaning that TFCI (field 1) and TFCI (field 2) are each 5 bits long and each field is block coded separately. "Logical": meaning that on the physical layer TFCI (field 1) and TFCI (field 2) are concatenated, field 1 taking the most significant bits and field 2 taking the least significant bits). The whole is then encoded with a single block code.
Length <i>e</i> Of TFCI2	C-SplitType		Integer-INTEGER (1..10)	This IE indicates the length measured in number of bits of TFCI (field2).

Condition	Explanation
IfSplit	The IE shall be present if the <i>TFCI s</i> Signalling <i>e</i> Option IE is set to "Split".
SplitType	The IE shall be present if the <i>Split t</i> Type IE is set to "Logical".

9.2.2.51 TGD

Void.

9.2.2.52 TGL

Void.

9.2.2.53 Transmit Diversity Indicator

The Transmit Diversity Indicator indicates whether transmit diversity shall be active or not.

IE/Group Name	Presence	Range	IE <i>t</i> Type and <i>r</i> Reference	Semantics <i>d</i> Description
Transmit Diversity Indicator			ENUMERATED (active, inactive)	

9.2.2.53A Transmission Gap Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence. For details see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Transmission Gap Pattern Sequence Information		$1..<maxTGPS>4$ to $<MaxTGPS>S$		
>TGPS Identifier	M		INTEGER Integer (1..<MmaxTGPS>)	Transmission Gap Pattern Sequence Identifier; Establish a reference to the compressed mode pattern sequence. Up to <MmaxTGPS> simultaneous compressed mode pattern sequences can be used.
>TGSN	M		INTEGER INTEGER (0..14)	Transmission Gap Starting Slot Number; The slot number of the first transmission gap slot within the TGCFN.
>TGL1	M		INTEGER INTEGER (1..14)	The length of the first Transmission Gap within the transmission gap pattern expressed in number of slots.
>TGL2	O		INTEGER INTEGER (1..14)	The length of the second Transmission Gap within the transmission gap pattern. If omitted, then TGL2=TGL1.
>TGD	M		INTEGER INTEGER (0, 15.. 269)	Transmission Gap Distance; indicates the number of slots between the starting slots of two consecutive transmission gaps within a transmission gap pattern. If there is only one transmission gap in the transmission gap pattern, this parameter shall be set to "0" ("0" =undefined).
>TGPL1	M		INTEGER INTEGER (1..144,...)	The duration of transmission gap pattern 1 in frames.
>TGPL2	O		INTEGER INTEGER (1..144,...)	The duration of transmission gap pattern 2 in frames. If omitted, then TGPL2=TGPL1.
>UL/DL Mode	M		Enumerated ENUMERATED (UL only, DL only, UL/DL)	Defines whether only DL, only UL, or combined UL/DL compressed mode is used.
>Downlink Compressed Mode Method	C-DL		Enumerated ENUMERATED (Puncturing, SF/2, Higher Layer Scheduling, ...)	Method for generating downlink compressed mode gap None means that compressed mode pattern is stopped.
>Uplink Compressed Mode Method	C-UL		Enumerated ENUMERATED (SF/2, Higher Layer Scheduling, ...)	Method for generating uplink compressed mode gap.
>Downlink Frame Type	M		Enumerated ENUMERATED (A, B,...)	Defines if frame structure type "A" or "B" shall be used in downlink compressed mode.
>DeltaSIR1	M		INTEGER INTEGER (0..30)	Delta in SIR target value to be set in the Node B during the frame containing the start of the first transmission gap in

				the transmission gap pattern (without including the effect of the bit-rate increase). Unit: dB Range: 0..3 dB Step: 0.1 dB, Range 0-3dB
>DeltaSIRafter1	M		Integer/INTEGER (0..30)	Delta in SIR target value to be set in the Node B one frame after the frame containing the start of the first transmission gap in the transmission gap pattern. Unit: dB Range: 0..3 dB Step: 0.1 dB, Range 0-3dB
>DeltaSIR2	O		Integer/INTEGER (0..30)	Delta in SIR target value to be set in the Node B during the frame containing the start of the second transmission gap in the transmission gap pattern (without including the effect of the bit-rate increase). When omitted, DeltaSIR2 = DeltaSIR1. Unit: dB Range: 0..3 dB Step: 0.1 dB, Range 0-3dB
>DeltaSIRafter2	O		Integer/INTEGER (0..30)	Delta in SIR target value to be set in the Node B one frame after the frame containing the start of the second transmission gap in the transmission gap pattern. When omitted, DeltaSIRafter2 = DeltaSIRafter1. Unit: dB Range: 0..3 dB Step: 0.1 dB, Range 0-3dB

Condition	Explanation
UL	The IE shall be present if the <i>UL/DL mode</i> IE is set to "UL only" or "UL/DL".
DL	The IE shall be present if the <i>UL/DL mode</i> IE is set to "DL only" or "UL/DL".

Range bBound	Explanation
maxTGPSMaxTGPS	Maximum number of transmission gap pattern sequences.

9.2.2.53B Transmission Gap Pattern Sequence Code Information

This IE indicates whether the alternative scrambling code shall used for the Downlink compressed mode method or not in the Transmission Gap Pattern Sequence. For details see [189].

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
Transmission Gap Pattern Sequence Code Information Scrambling code change			Enumerated ENUMERATED (Code Change, No Code Change)	Indicates whether the alternative scrambling code is used for compressed mode method "SF/2".

9.2.2.54 UL/DL compressed mode selection:

Void.

9.2.2.55 UL delta SIR

Void.

9.2.2.56 UL delta SIR after

Void.

9.2.2.57 UL DPCCH Slot Format

Indicates the slot format used in DPCCH in UL, according to ref. [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
UL DPCCH Slot Format			INTEGER (0..5,...)	

9.2.2.58 UL SIR

The UL SIR indicates a received UL SIR.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
UL SIR			ENUMERATED (-8.2...-17.3)	Step 0.1 dB

9.2.2.59 UL Scrambling Code

The UL Scrambling Code is the scrambling code used by UE. Every UE has its specific UL Scrambling Code.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
UL Scrambling Code Number	M		INTEGER (0.. $2^{24}-1$)	
UL Scrambling Code Length	M		ENUMERATED_ Short, Long)	

9.2.2.60 UL Capacity Credit

Void

9.2.3 TDD specific Parameters

9.2.3.1 Block STTD Indicator

Void.

9.2.3.2 Burst Type

Void.

9.2.3.3 CCTrCH ID

The CCTrCH ID for dedicated and shared channels identifies unambiguously an uplink or downlink CCTrCH inside a Radio Link. For S-CCPCH it identifies unambiguously a downlink CCTrCH within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CCTrCH ID			INTEGER (0..15)	

9.2.3.4 Cell Parameter ID

The Cell Parameter ID identifies unambiguously the Code Groups, Scrambling Codes, Midambles and Toffset (see ref. [20]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Parameter ID			INTEGER (0..127,...)	

9.2.3.4A Constant Value

The Constant Value is the power margin used by a UE to set the proper uplink power for a DCH, USCH, or a RACH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Constant Value			INTEGER (-10..10,...)	Unit: dB Range: -10 .. +10 dB StepGranularity: 1 dB.

9.2.3.4B DL Timeslot ISCP

The DL Timeslot ISCP is the measured interference in a downlink timeslot at the UE, see ref. [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Timeslot ISCP			INTEGER (0..91)	According to mapping in ref. [5].

9.2.3.4C DCH TDD Information

The *DCH TDD Information* IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE \dagger Type and \dagger Reference	Semantics \dagger Descriptions
DCH TDD Information		<i>1..<maxno ofDCHs>1 to <maxno of DCHs></i>		
>Payload CRC Presence Indicator	M		9.2.1.49	
>UL FP \dagger Mode	M		9.2.1.66	
>ToAWS	M		9.2.1.61	
>ToAWE	M		9.2.1.60	
>DCH Specific Info		<i>1..<maxno ofDCHs></i>		
>>DCH ID	M		9.2.1.20	
>>CCTrCH ID	M		9.2.3.3	UL CCTrCH in which the DCH is mapped
>>CCTrCH ID	M		9.2.3.3	DL CCTrCH in which the DCH is mapped
>>Transport Format Set	M		9.2.1.59	For UL
>>Transport Format Set	M		9.2.1.59	For DL
>>Allocation/Retention Priority	M		9.2.1.1A	
>>Frame Handling Priority	M		9.2.1.30	
>>QE-Selector	C-CoordDCH		9.2.1.50A	

Condition	Explanation
CoordDCH	The IE shall be present if this DCH is part of a set of coordinated DCHs (number of instances of the <i>DCH Specific Info</i> IE is greater than 1).

Range \dagger Bound	Explanation
<i>Mmaxno ofDCHs</i>	Maximum number of DCHs for one UE

9.2.3.4D DCHs TDD \dagger To Modify

The *DCHs TDD \dagger To Modify* IE provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE type and reference	Semantics descriptions	Criticality	Assigned Criticality
DCHs TDD to Modify		1..<maxno of DCHs>			GLOBAL	reject
>UL FP Mode	O		9.2.1.66		-	
>ToAWS	O		9.2.1.64		-	
>ToAWE	O		9.2.1.60		-	
>Transport Bearer Request Indicator	M		9.2.1.62A		-	
>DCH Specific Info		1..<maxno of DCHs>			-	
>>DCH ID	M		9.2.1.20		-	
>>CCTrCH ID	O		9.2.3.3	UL CCTrCH in which the DCH is mapped.	-	
>>CCTrCH ID	O		9.2.3.3	DL CCTrCH in which the DCH is mapped	-	
>>Transport Format Set	O		9.2.1.59	For the UL.	-	
>>Transport Format Set	O		9.2.1.59	For the DL.	-	
>>Allocation/Retention Priority	O		9.2.1.1A		-	
>>Frame Handling Priority	O		9.2.1.30		-	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCHs TDD To Modify		1..<maxno of DCHs>		
>UL FP Mode	O		9.2.1.66	
>ToAWS	O		9.2.1.64	
>ToAWE	O		9.2.1.60	
>Transport Bearer Request Indicator	M		9.2.1.62A	
>DCH Specific Info		1..<maxno of DCHs>		
>>DCH ID	M		9.2.1.20	
>>CCTrCH ID	O		9.2.3.3	UL CCTrCH in which the DCH is mapped.
>>CCTrCH ID	O		9.2.3.3	DL CCTrCH in which the DCH is mapped
>>Transport Format Set	O		9.2.1.59	For the UL.
>>Transport Format Set	O		9.2.1.59	For the DL.
>>Allocation/Retention Priority	O		9.2.1.1A	
>>Frame Handling Priority	O		9.2.1.30	

Range bBound	Explanation
MmaxnoofDCHs	Maximum number of DCHs for one UE

9.2.3.4E DL Timeslot Information

The DL Timeslot Information IE provides information for DL Time slot to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Timeslot Information		<i>1..<maxno ofDLts>1.. <maxno of DLts></i>		
>Time Slot	M		9.2.3.23	
>Midamble Shift and Burst Type	M		9.2.3.7	
>TFCI Presence	M		9.2.1.57	
>DL Code Information	M		TDD DL Code Information 9.2.3.19B	

Range Bound	Explanation
<i>Mmaxno ofDLts</i>	Maximum number of Downlink time slots per Radio Link

9.2.3.4F DL Time Slot ISCP Info

The *DL Time Slot ISCP Info* IE provides information for DL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Time Slot ISCP Info		<i>1..<maxno ofDLts>1.. <maxno of DLts></i>		
>Time Slot	M		9.2.3.23	
>DL Timeslot ISCP	M		9.2.3.4B	

Range Bound	Explanation
<i>Mmaxno ofDLts</i>	Maximum number of Downlink time slots per Radio Link

9.2.3.5 DPCH ID

The DPCH ID identifies unambiguously a DPCH inside a Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPCH ID			INTEGER (0..239)	

9.2.3.5A DSCH TDD Information

The *DSCH TDD Information* IE provides information for DSCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
DSCH TDD Information		<i>1..<maxno of DSCHs> 1 to <Maxno of DSCHs></i>		
>DSCH ID	M		9.2.1.27	
>CCTrCH ID	M		9.2.3.2	DL CCTrCH in which the DSCH is mapped
>Transport Format Set	M		9.2.1.59	For DSCH
>Allocation/Retention Priority	M		9.2.1.1A	
>Frame Handling Priority	M		9.2.1.30	
>ToAWS	M		9.2.1.61	
>ToAWE	M		9.2.1.60	

Range Bound	Explanation
<i>Mmaxno of DSCHs</i>	Maximum number of DSCH for one UE

9.2.3.6 Max PRACH Midamble Shift

Indicates the maximum number of Midamble shifts to be used in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Max PRACH Midamble Shifts			ENUMERATED (4, 8,...)	

9.2.3.7 Midamble Shift and Burst Type

This information element indicates burst type and midamble allocation.

The 256 chip midamble supports 3 different time shifts, the 512 chips midamble may support 8 or even 16 time shifts.

Three different midamble allocation schemes exist:

Default midamble: the midamble shift is selected by layer 1 depending on the associated channelisation code (DL and UL)

Common midamble: the midamble shift is chosen by layer 1 depending on the number of channelisation codes (possible in DL only)

UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL)

IE/Group-Name	Presence	Range	IE type and reference	Semantics description
CHOICE <i>Burst Type</i>				
>Type1				
>>Midamble Allocation Mode	M		Enumerated (Default midamble, Common midamble, UE specific midamble)	
>> Midamble Configuration Burst Type 1 And 3	M		Integer(4, 8, 16)	As defined in [19]
>>Midamble Shift	C-UE		Integer(0..15)	
>Type2				
>>Midamble Allocation Mode	M		Enumerated (Default midamble, Common midamble, UE specific midamble)	
>> Midamble Configuration Burst Type 2	M		Integer(3,6)	As defined in [19]
>>Midamble Shift	C-UE		INTEGER (0..5)	
>Type3				
>>Midamble Allocation Mode	M		Enumerated (Default midamble, UE specific midamble)	UE only
>> Midamble Configuration Burst Type 1 And 3	M		Integer(4, 8, 16)	As defined in [19]
>>Midamble Shift	C-UE		Integer(0..15)	

Condition	Explanation
UE	The IE shall be present if the <i>Midamble Allocation Mode</i> IE is set to "UE-specific midamble".

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Burst Type				
>Type1				
>>Midamble Configuration Burst Type 1 And 3	M		INTEGER (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	M			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (0..15)	
>Type2				
>>Midamble Configuration Burst Type 2	M		INTEGER (3,6)	As defined in [19]
>>CHOICE Midamble Allocation Mode	M			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Short	M		INTEGER (0..5)	
>Type3				UL only
>>Midamble Configuration Burst Type 1 And 3	M		INTEGER (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	M			
>>>Default Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (0..15)	

9.2.3.8 Paging Indicator Length

The Paging Indicator Length indicates the number of symbols for Page Indication transmitted in one timeslot (see ref. [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging Indicator Length			ENUMERATED (2, 4, 8,...)	

9.2.3.9 PCCPCH Power

The Primary CCPCH power is the power that shall be used for transmitting the P-CCPCH in a cell. The P-CCPCH power is the reference power in a TDD-cell. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PCCPCH Power			INTEGER (-15..+40,...)	Unit: dBm Range: -15..+40 dBm StepGranularity: 0.1 dB

9.2.3.10 PDSCH ID

The PDSCH ID identifies unambiguously a PDSCH inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PDSCH ID			INTEGER (0..255)	

9.2.3.11 PDSCH Set ID

The PDSCH Set Id identifies unambiguously a PDSCH Set inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PDSCH Set ID			INTEGER (0..255)	See ref. [6]

9.2.3.12 PUSCH ID

The PUSCH ID identifies unambiguously a PUSCH inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PUSCH ID			INTEGER (0..255)	

9.2.3.13 PUSCH Set ID

The PUSCH Set ID identifies unambiguously a PUSCH Set inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PUSCH Set ID			INTEGER (0..255)	See ref. [6]

9.2.3.14 PRACH Midamble

The PRACH Midamble indicates if only the Basic Midamble Sequence or also the time-inverted Midamble Sequence is used.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PRACH Midamble			ENUMERATED (Inverted, Direct, ..)	

9.2.3.15 Repetition Length

The Repetition Length represents the number of consecutive Radio Frames inside a Repetition Period in which the same Time Slot is assigned to the same Physical Channel see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Length			INTEGER (1..63)	

9.2.3.16 Repetition Period

The Repetition Period represents the number of consecutive Radio Frames after which the same assignment scheme of Time Slots to a Physical Channel is repeated. This means that if the Time Slot K is assigned to a physical channel in the

Radio Frame J , it is assigned to the same physical channel also in all the Radio Frames $J+n*Repetition\ Period$ (where n is an integer) see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Period			ENUMERATED (1, 2, 4, 8, 16, 32, 64,...)	

9.2.3.17 SCH Time Slot

The *SCH Time Slot* IE represents the first time slot (k) of a pair of time slots inside a Radio Frame that shall be assigned to the Physical Channel SCH. The *SCH Time Slot* IE is only applicable if the value of *Sync Case* IE is Case 2 since in this case the SCH is allocated in TS# k and TS# $k+8$.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SCH Time Slot			-INTEGER_(0..6)	

9.2.3.18 Sync Case

The SCH and PCCPCH are mapped on one or two downlink slots per frame. There are two cases of SCH and PCCPCH allocation as follows:

- Case 1) SCH and PCCPCH allocated in a single TS# k
- Case 2) SCH allocated in two TS: TS# k and TS# $k+8$
PCCPCH allocated in TS# k

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Case			Integer INTEGER (1..2,...)	

9.2.3.18A Special Burst Scheduling

The number of frames between special burst transmissions during DTX.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Special Burst Scheduling			Integer INTEGER (1, 2,...,256)	Number of frames between special burst transmission during DTX

9.2.3.19 TDD Channelisation Code

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code, that can have a spreading factor of 1, 2, 4, 8 or 16.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Channelisation Code			ENUMERATED ((1/1), (2/1), (2/2), (4/1), .. (4/4), (8/1), .. (8/8), (16/1), .. (16/16)-,....)	

9.2.3.19A TDD DPCH Offset

The Offset represents the phase information for the allocation of a group of dedicated physical channels. The first range is used when a starting offset is not required and the TDD Physical channel offset for each DPCH in the CCTrCH shall be directly determined from the TDD DPCH Offset. The second range is used when a starting offset is required. The TDD DPCH Offset shall map to the CFN and the TDD Physical Channel Offset for each DPCH in this CCTrCH shall be calculated by TDD DPCH Offset *mod* Repetition period, see ref. [18].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TDD DPCH Offset			CHOICE INTEGER (0..63) or INTEGER (0..255)	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Offset Type				
>Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER (0..255)	
>No Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER (0..63)	

9.2.3.19B TDD DL Code Information

The TDD DL Code Information IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD DL Code Information		1..<maxno of DPCHs> 1.. <maxnoOf DPCH>		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code	M		9.2.3.19	

Range Bound	Explanation
MmaxnoOfDPCHs	Maximum number of DPCHs in one CCTrCH

9.2.3.20 TDD Physical Channel Offset

The Offset represents the phase information for the allocation of a physical channel. (SFN mod Repetition Period = Offset) see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Physical Channel Offset			INTEGER (0..63)	

9.2.3.21 TDD TPC DL Step Size

This parameter indicates step size for the DL power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Downlink Step Size			ENUMERATED (1, 2, 3,...)	

9.2.3.21A TDD UL Code Information

The *TDD UL Code Information* IE provides information for UL Code to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD UL Code Information		1..<maxno of DPCHs> 1.. <maxnoOf DPCH>		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code	M		9.2.3.19	

Range Bound	Explanation
MmaxnoOfDPCHs	Maximum number of DPCHs in one CCTrCH

9.2.3.22 TFCI Coding

The TFCI Coding describes the way how the TFCI bits are coded. By default 1 TFCI bit is coded with 4 bits, 2 TFCI bits are coded with 8 bits, 3-5 TFCI bits are coded with 16 bits and 6-10 TFCI bits are coded with 32 bits.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Coding			Enumerated ENUMERATED (4, 8, 16, 32,...)	

9.2.3.22A Timing Advance Applied

Defines the need for Rx Timing Deviation measurement results to be reported in a particular cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timing Advance Applied			ENUMERATED (Yes, No)	

9.2.3.23 Time Slot

The Time Slot represents the minimum time interval inside a Radio Frame that can be assigned to a Physical Channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot			INTEGER (0..14)	

9.2.3.24 Time Slot Direction

This parameter indicates whether the TS in the cell is used in Uplink or Downlink direction.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot Direction			Enumerated ENUMERATED (UL, DL, ...)	

9.2.3.25 Time Slot Status

This parameter indicates whether the TS in the cell is active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot Status			Enumerated ENUMERATED (Active, Not_Active, ...)	

9.2.3.26 Transmission Diversity Applied

Defines if Transmission Diversity on DCHs is to be applied in a cell (see ref. [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Diversity Applied			Boolean BOOLEAN	True: Transmission Diversity shall be applied in this Cell. False: Transmission Diversity shall not be applied in this Cell.

9.2.3.26A UL Timeslot ISCP

UL Timeslot ISCP is the measured interference in a uplink timeslot at the Node B, see ref. [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot ISCP			INTEGER (0..127)	According to mapping in [23].

9.2.3.26B UL PhysCH SF Variation

Indicates whether variation of SF in UL is supported by Radio Link or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL PhysCH SF Variation			ENUMERATED (SF_Variation_supported, SF_Variation_NOT_supported)	

9.2.3.26C UL Timeslot Information

The *UL Timeslot Information* IE provides information on the time slot allocation for an UL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
UL Timeslot Information		<i>1..<maxno of ULts>1.. <maxno of ULts></i>		
>Time Slot	M		9.2.3.23	
>Midamble Shift and Burst Type	M		9.2.3.7	
>TFCI Presence	M		9.2.1.57	
>UL Code Information	M		TDD UL Code Information 9.2.3.21A	

Range Bound	Explanation
<i>Mmaxno of ULts</i>	Maximum number of Uplink time slots per Radio Link

9.2.3.26D UL Time Slot ISCP Info

The *UL Time Slot ISCP Info* IE provides information for UL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
UL Time Slot ISCP Info		<i>1..<maxno of ULts>1.. <maxno of ULts></i>		
>Time Slot	M		9.2.3.23	
>UL Timeslot ISCP	M		9.2.3.26A	

Range Bound	Explanation
<i>Mmaxno of ULts</i>	Maximum number of Uplink time slots per Radio Link

9.2.3.27 USCH ID

The USCH ID uniquely identifies a USCH within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
USCH ID			INTEGER (0..255)	

9.2.3.28 USCH Information

The *USCH Information* IE provides information for USCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
USCH Information		<i>1..<maxno of USCHs> 1 to <Maxno of USCHs></i>		
>USCH ID	M		9.2.3.27	
>CCTrCH ID	M		9.2.3.3	UL CCTrCH in which the USCH is mapped
>Transport Format Set	M		9.2.1.59	For USCH
>Allocation/Retention Priority	M		9.2.1.1A	

Range Bound	Explanation
<i>Mmaxno of USCHs</i>	Maximum number of USCHs for one UE

9.2.3.29 USCH Information Response

The *USCH Information Response* IE provides information for USCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
USCH Information Response		<i>1..<maxno of USCHs> 1.. <Maxno of USCHs></i>		
>USCH ID	M		9.2.3.27	
>Binding ID	O		9.2.1.4	
>Transport Layer Address	O		9.2.1.63	

Range Bound	Explanation
<i>Mmaxno of USCHs</i>	Maximum number of USCHs for one UE

9.2.3.30 SCTD Indicator

Indicates if SCTD antenna diversity is applied or not to the PCCPCH and PICH.

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
SCTD Indicator			ENUMERATED_(active, inactive)	

9.3 Message and Information eElement aAbstract sSyntax (with ASN.1)

9.3.0 General

Subclause 9.3 presents the Abstract Syntax of NBAP protocol with ASN.1. In case there is contradiction between the ASN.1 definition in this subclause and the tabular format in subclauses 9.1 and 9.2, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, where the tabular format shall take precedence.

The ASN.1 definition specifies the structure and content of NBAP messages. NBAP messages can contain any IEs specified in the object set definitions for that message without the order or number of occurrence being restricted by ASN.1. However, for this version of the standard, a sending entity shall construct a NBAP message according to the PDU definitions module and with the following additional rules (Note that in the following IE means an IE in the object set with an explicit id. If one IE needed to appear more than once in one object set, then the different occurrences have different IE ids):

- IEs shall be ordered (in an IE container) in the order they appear in object set definitions.
- Object set definitions specify how many times IEs may appear. An IE shall appear exactly once if the presence field in an object has value "mandatory". An IE may appear at most once if the presence field in an object has value "optional" or "conditional". If in a tabular format there is multiplicity specified for an IE (i.e. an IE list) then in the corresponding ASN.1 definition the list definition is separated into two parts. The first part defines an IE container list where the list elements reside. The second part defines list elements. The IE container list appears as an IE of its own. For this version of the standard an IE container list may contain only one kind of list elements.

If a NBAP message that is not constructed as defined above is received, this shall be considered as Abstract Syntax Error, and the message shall be handled as defined for Abstract Syntax Error in subclause 10.3.6.

9.3.1 Usage of Private Message mechanism for non-standard use

The private message mechanism for non-standard use may be used

- For special operator- (and/or vendor) specific features considered not to be part of the basic functionality, i.e. the functionality required for a complete and high-quality specification in order to guarantee multi-vendor inter-operability.
- By vendors for research purposes, e.g. to implement and evaluate new algorithms/features before such features are proposed for standardisation

The private message mechanism shall not be used for basic functionality. Such functionality shall be standardised.

9.3.2 Elementary Procedure Definitions

```
-- *****
--
-- Elementary Procedure definitions
--
-- *****
```

```
NBAP-PDU-Descriptions {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Descriptions (0) }
```

```
DEFINITIONS AUTOMATIC TAGS ::=
```

```
BEGIN
```

```
-- *****
--
-- IE parameter types from other modules.
--
-- *****
```

```
IMPORTS
```

```
    Criticality,
    ProcedureID,
    MessageDiscriminator,
    TransactionID
```

```
FROM NBAP-CommonDataTypes
```

```
    CommonTransportChannelSetupRequestFDD,
    CommonTransportChannelSetupRequestTDD,
    CommonTransportChannelSetupResponse,
    CommonTransportChannelSetupFailure,
    CommonTransportChannelReconfigurationRequestFDD,
    CommonTransportChannelReconfigurationRequestTDD,
    CommonTransportChannelReconfigurationResponse,
    CommonTransportChannelReconfigurationFailure,
    CommonTransportChannelDeletionRequest,
    CommonTransportChannelDeletionResponse,
    BlockResourceRequest,
    BlockResourceResponse,
    BlockResourceFailure,
    UnblockResourceIndication,
    AuditFailure,
    AuditRequiredIndication,
    AuditRequest,
    AuditResponse,
    CommonMeasurementInitiationRequest,
    CommonMeasurementInitiationResponse,
    CommonMeasurementInitiationFailure,
    CommonMeasurementReport,
    CommonMeasurementTerminationRequest,
    CommonMeasurementFailureIndication,
    CellSetupRequestFDD,
    CellSetupRequestTDD,
    CellSetupResponse,
    CellSetupFailure,
    CellReconfigurationRequestFDD,
    CellReconfigurationRequestTDD,
    CellReconfigurationResponse,
```

CellReconfigurationFailure,
CellDeletionRequest,
CellDeletionResponse,
ResourceStatusIndication,
SystemInformationUpdateRequest,
SystemInformationUpdateResponse,
SystemInformationUpdateFailure,
ResetRequest,
ResetResponse,
RadioLinkPreemptionRequiredIndication,
RadioLinkSetupRequestFDD,
RadioLinkSetupRequestTDD,
RadioLinkSetupResponseFDD,
RadioLinkSetupResponseTDD,
RadioLinkSetupFailureFDD,
RadioLinkSetupFailureTDD,
RadioLinkAdditionRequestFDD,
RadioLinkAdditionRequestTDD,
RadioLinkAdditionResponseFDD,
RadioLinkAdditionResponseTDD,
RadioLinkAdditionFailureFDD,
RadioLinkAdditionFailureTDD,
RadioLinkReconfigurationPrepareFDD,
RadioLinkReconfigurationPrepareTDD,
RadioLinkReconfigurationReady,
RadioLinkReconfigurationFailure,
RadioLinkReconfigurationCommit,
RadioLinkReconfigurationCancel,
RadioLinkReconfigurationRequestFDD,
RadioLinkReconfigurationRequestTDD,
RadioLinkReconfigurationResponse,
RadioLinkDeletionRequest,
RadioLinkDeletionResponse,
DL-PowerControlRequest,
DL-PowerTimeslotControlRequest,
DedicatedMeasurementInitiationRequest,
DedicatedMeasurementInitiationResponse,
DedicatedMeasurementInitiationFailure,
DedicatedMeasurementReport,
DedicatedMeasurementTerminationRequest,
DedicatedMeasurementFailureIndication,
RadioLinkFailureIndication,
RadioLinkRestoreIndication,
CompressedModeCommand,
ErrorIndication,
PrivateMessage,
PhysicalSharedChannelReconfigurationRequestTDD,
PhysicalSharedChannelReconfigurationResponseTDD,
PhysicalSharedChannelReconfigurationFailureTDD

FROM NBAP-PDU-Contents

id-audit,
id-auditRequired,

```

id-blockResource,
id-cellDeletion,
id-cellReconfiguration,
id-cellSetup,
id-commonMeasurementFailure,
id-commonMeasurementInitiation,
id-commonMeasurementReport,
id-commonMeasurementTermination,
id-commonTransportChannelDelete,
id-commonTransportChannelReconfigure,
id-commonTransportChannelSetup,
id-compressedModeCommand,
id-dedicatedMeasurementFailure,
id-dedicatedMeasurementInitiation,
id-dedicatedMeasurementReport,
id-dedicatedMeasurementTermination,
id-downlinkPowerControl,
id-downlinkPowerTimeslotControl,
id-errorIndicationForDedicated,
id-errorIndicationForCommon,
id-physicalSharedChannelReconfiguration,
id-privateMessageForDedicated,
id-privateMessageForCommon,
id-radioLinkAddition,
id-radioLinkDeletion,
id-radioLinkFailure,
id-radioLinkPreemption,
id-radioLinkRestoration,
id-radioLinkSetup,
id-reset,
id-resourceStatusIndication,
id-synchronisedRadioLinkReconfigurationCancellation,
id-synchronisedRadioLinkReconfigurationCommit,
id-synchronisedRadioLinkReconfigurationPreparation,
id-systemInformationUpdate,
id-unblockResource,
id-unSynchronisedRadioLinkReconfiguration
FROM NBAP-Constants;

-- *****
--
-- Interface Elementary Procedure Class
--
-- *****

NBAP-ELEMENTARY-PROCEDURE ::= CLASS {
    &InitiatingMessage           ,
    &SuccessfulOutcome           OPTIONAL,
    &UnsuccessfulOutcome         OPTIONAL,
    &Outcome                     OPTIONAL,
    &messageDiscriminator        MessageDiscriminator,
    &procedureID                 ProcedureID    UNIQUE,
    &criticality                 Criticality     DEFAULT ignore

```

```

}

WITH SYNTAX {
    INITIATING MESSAGE           &InitiatingMessage
    [SUCCESSFUL OUTCOME          &SuccessfulOutcome]
    [UNSUCCESSFUL OUTCOME       &UnsuccessfulOutcome]
    [OUTCOME                     &Outcome]
    MESSAGE DISCRIMINATOR       &messageDiscriminator
    PROCEDURE ID                 &procedureID
    [CRITICALITY                 &criticality]
}

-- *****
--
-- Interface PDU Definition
--
-- *****

NBAP-PDU ::= CHOICE {
    initiatingMessage           InitiatingMessage,
    succesfulOutcome            SuccessfulOutcome,
    unsuccessfulOutcome         UnsuccessfulOutcome,
    outcome                     Outcome,
    ...
}

InitiatingMessage ::= SEQUENCE {
    procedureID                 NBAP-ELEMENTARY-PROCEDURE.&procedureID   ( {NBAP-ELEMENTARY-PROCEDURES} ),
    criticality                  NBAP-ELEMENTARY-PROCEDURE.&criticality ( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    messageDiscriminator        NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    transactionID                TransactionID,
    value                         NBAP-ELEMENTARY-PROCEDURE.&InitiatingMessage( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} )
}

SuccessfulOutcome ::= SEQUENCE {
    procedureID                 NBAP-ELEMENTARY-PROCEDURE.&procedureID   ( {NBAP-ELEMENTARY-PROCEDURES} ),
    criticality                  NBAP-ELEMENTARY-PROCEDURE.&criticality ( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    messageDiscriminator        NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    transactionID                TransactionID,
    value                         NBAP-ELEMENTARY-PROCEDURE.&SuccessfulOutcome( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} )
}

UnsuccessfulOutcome ::= SEQUENCE {
    procedureID                 NBAP-ELEMENTARY-PROCEDURE.&procedureID   ( {NBAP-ELEMENTARY-PROCEDURES} ),
    criticality                  NBAP-ELEMENTARY-PROCEDURE.&criticality ( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    messageDiscriminator        NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    transactionID                TransactionID,
    value                         NBAP-ELEMENTARY-PROCEDURE.&UnsuccessfulOutcome( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} )
}

Outcome ::= SEQUENCE {
    procedureID                 NBAP-ELEMENTARY-PROCEDURE.&procedureID   ( {NBAP-ELEMENTARY-PROCEDURES} ),
    criticality                  NBAP-ELEMENTARY-PROCEDURE.&criticality ( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
}

```

```

messageDiscriminator NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
transactionID       TransactionID,
value               NBAP-ELEMENTARY-PROCEDURE.&Outcome  ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
}

```

```

-- *****
--
-- Interface Elementary Procedure List
--
-- *****

```

```

NBAP-ELEMENTARY-PROCEDURES NBAP-ELEMENTARY-PROCEDURE ::= {
  NBAP-ELEMENTARY-PROCEDURES-CLASS-1 |
  NBAP-ELEMENTARY-PROCEDURES-CLASS-2 |
  ...
}

```

```

NBAP-ELEMENTARY-PROCEDURES-CLASS-1 NBAP-ELEMENTARY-PROCEDURE ::= {
  cellSetupFDD
  cellSetupTDD
  cellReconfigurationFDD
  cellReconfigurationTDD
  cellDeletion
  commonTransportChannelSetupFDD
  commonTransportChannelSetupTDD
  commonTransportChannelReconfigureFDD
  commonTransportChannelReconfigureTDD
  commonTransportChannelDelete
  audit
  blockResource
  radioLinkSetupFDD
  radioLinkSetupTDD
  systemInformationUpdate
  commonMeasurementInitiation
  radioLinkAdditionFDD
  radioLinkAdditionTDD
  radioLinkDeletion
  reset
  synchronisedRadioLinkReconfigurationPreparationFDD
  synchronisedRadioLinkReconfigurationPreparationTDD
  unSynchronisedRadioLinkReconfigurationFDD
  unSynchronisedRadioLinkReconfigurationTDD
  dedicatedMeasurementInitiation
  physicalSharedChannelReconfiguration
  ...
}

```

```

NBAP-ELEMENTARY-PROCEDURES-CLASS-2 NBAP-ELEMENTARY-PROCEDURE ::= {
  resourceStatusIndication
  auditRequired
  commonMeasurementReport
  commonMeasurementTermination
  commonMeasurementFailure
}

```



```

synchronisedRadioLinkReconfigurationCommit
synchronisedRadioLinkReconfigurationCancellation
radioLinkFailure
radioLinkPreemption
radioLinkRestoration
dedicatedMeasurementReport
dedicatedMeasurementTermination
dedicatedMeasurementFailure
downlinkPowerControlFDD
downlinkPowerTimeslotControl
compressedModeCommand
unblockResource
errorIndicationForDedicated
errorIndicationForCommon
privateMessageForDedicated
privateMessageForCommon
...
}

-- *****
--
-- Interface Elementary Procedures
--
-- *****

-- Class 1

-- *** CellSetup (FDD) ***
cellSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CellSetupRequestFDD
  SUCCESSFUL OUTCOME      CellSetupResponse
  UNSUCCESSFUL OUTCOME    CellSetupFailure
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-cellSetup, ddMode fdd }
  CRITICALITY              reject
}

-- *** CellSetup (TDD) ***
cellSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CellSetupRequestTDD
  SUCCESSFUL OUTCOME      CellSetupResponse
  UNSUCCESSFUL OUTCOME    CellSetupFailure
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-cellSetup, ddMode tdd }
  CRITICALITY              reject
}

-- *** CellReconfiguration(FDD) ***
cellReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CellReconfigurationRequestFDD
  SUCCESSFUL OUTCOME      CellReconfigurationResponse
  UNSUCCESSFUL OUTCOME    CellReconfigurationFailure
  MESSAGE DISCRIMINATOR   common
}

```

```

    PROCEDURE ID          { procedureCode id-cellReconfiguration, ddMode fdd }
    CRITICALITY          reject
}

-- *** CellReconfiguration(TDD) ***
cellReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CellReconfigurationRequestTDD
    SUCCESSFUL OUTCOME    CellReconfigurationResponse
    UNSUCCESSFUL OUTCOME CellReconfigurationFailure
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-cellReconfiguration, ddMode tdd }
    CRITICALITY          reject
}

-- *** CellDeletion ***
cellDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CellDeletionRequest
    SUCCESSFUL OUTCOME    CellDeletionResponse
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-cellDeletion, ddMode common }
    CRITICALITY          reject
}

-- *** CommonTransportChannelSetup (FDD) ***
commonTransportChannelSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CommonTransportChannelSetupRequestFDD
    SUCCESSFUL OUTCOME    CommonTransportChannelSetupResponse
    UNSUCCESSFUL OUTCOME CommonTransportChannelSetupFailure
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-commonTransportChannelSetup, ddMode fdd }
    CRITICALITY          reject
}

-- *** CommonTransportChannelSetup (TDD) ***
commonTransportChannelSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CommonTransportChannelSetupRequestTDD
    SUCCESSFUL OUTCOME    CommonTransportChannelSetupResponse
    UNSUCCESSFUL OUTCOME CommonTransportChannelSetupFailure
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-commonTransportChannelSetup, ddMode tdd }
    CRITICALITY          reject
}

-- *** CommonTransportChannelReconfigure (FDD) ***
commonTransportChannelReconfigureFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CommonTransportChannelReconfigurationRequestFDD
    SUCCESSFUL OUTCOME    CommonTransportChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME CommonTransportChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-commonTransportChannelReconfigure, ddMode fdd }
    CRITICALITY          reject
}

```

```
-- *** CommonTransportChannelReconfigure (TDD) ***
commonTransportChannelReconfigureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonTransportChannelReconfigurationRequestTDD
    SUCCESSFUL OUTCOME      CommonTransportChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME    CommonTransportChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonTransportChannelReconfigure, ddMode tdd }
    CRITICALITY             reject
}

-- *** CommonTransportChannelDelete ***
commonTransportChannelDelete NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonTransportChannelDeletionRequest
    SUCCESSFUL OUTCOME      CommonTransportChannelDeletionResponse
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonTransportChannelDelete, ddMode common }
    CRITICALITY             reject
}

-- *** Audit ***
audit NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      AuditRequest
    SUCCESSFUL OUTCOME      AuditResponse
    UNSUCCESSFUL OUTCOME    AuditFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-audit, ddMode common }
    CRITICALITY             reject
}

-- *** BlockResourceRequest ***
blockResource NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      BlockResourceRequest
    SUCCESSFUL OUTCOME      BlockResourceResponse
    UNSUCCESSFUL OUTCOME    BlockResourceFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-blockResource, ddMode common }
    CRITICALITY             reject
}

-- *** RadioLinkSetup (FDD) ***
radioLinkSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkSetupRequestFDD
    SUCCESSFUL OUTCOME      RadioLinkSetupResponseFDD
    UNSUCCESSFUL OUTCOME    RadioLinkSetupFailureFDD
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-radioLinkSetup, ddMode fdd }
    CRITICALITY             reject
}

-- *** RadioLinkSetup (TDD) ***
radioLinkSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkSetupRequestTDD
    SUCCESSFUL OUTCOME      RadioLinkSetupResponseTDD
```

```
UNSUCCESSFUL OUTCOME    RadioLinkSetupFailureTDD
MESSAGE DISCRIMINATOR   common
PROCEDURE ID            { procedureCode id-radioLinkSetup, ddMode tdd }
CRITICALITY             reject
}

-- *** SystemInformationUpdate ***
systemInformationUpdate NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     SystemInformationUpdateRequest
  SUCCESSFUL OUTCOME     SystemInformationUpdateResponse
  UNSUCCESSFUL OUTCOME   SystemInformationUpdateFailure
  MESSAGE DISCRIMINATOR  common
  PROCEDURE ID           { procedureCode id-systemInformationUpdate, ddMode common }
  CRITICALITY            reject
}

-- *** Reset ***
reset NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     ResetRequest
  SUCCESSFUL OUTCOME     ResetResponse
  MESSAGE DISCRIMINATOR  common
  PROCEDURE ID           { procedureCode id-reset, ddMode common }
  CRITICALITY            reject
}

-- *** CommonMeasurementInitiation ***
commonMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     CommonMeasurementInitiationRequest
  SUCCESSFUL OUTCOME     CommonMeasurementInitiationResponse
  UNSUCCESSFUL OUTCOME   CommonMeasurementInitiationFailure
  MESSAGE DISCRIMINATOR  common
  PROCEDURE ID           { procedureCode id-commonMeasurementInitiation, ddMode common }
  CRITICALITY            reject
}

-- *** RadioLinkAddition (FDD) ***
radioLinkAdditionFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     RadioLinkAdditionRequestFDD
  SUCCESSFUL OUTCOME     RadioLinkAdditionResponseFDD
  UNSUCCESSFUL OUTCOME   RadioLinkAdditionFailureFDD
  MESSAGE DISCRIMINATOR  dedicated
  PROCEDURE ID           { procedureCode id-radioLinkAddition, ddMode fdd }
  CRITICALITY            reject
}

-- *** RadioLinkAddition (TDD) ***
radioLinkAdditionTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     RadioLinkAdditionRequestTDD
  SUCCESSFUL OUTCOME     RadioLinkAdditionResponseTDD
  UNSUCCESSFUL OUTCOME   RadioLinkAdditionFailureTDD
  MESSAGE DISCRIMINATOR  dedicated
  PROCEDURE ID           { procedureCode id-radioLinkAddition, ddMode tdd }
  CRITICALITY            reject
}
```

```

}

-- *** RadioLinkDeletion ***
radioLinkDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkDeletionRequest
    SUCCESSFUL OUTCOME      RadioLinkDeletionResponse
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkDeletion, ddMode common }
    CRITICALITY             reject
}

-- *** SynchronisedRadioLinkReconfigurationPreparation (FDD) ***
synchronisedRadioLinkReconfigurationPreparationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationPrepareFDD
    SUCCESSFUL OUTCOME      RadioLinkReconfigurationReady
    UNSUCCESSFUL OUTCOME    RadioLinkReconfigurationFailure
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
    CRITICALITY             reject
}

-- *** SynchronisedRadioLinkReconfigurationPreparation (TDD) ***
synchronisedRadioLinkReconfigurationPreparationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationPrepareTDD
    SUCCESSFUL OUTCOME      RadioLinkReconfigurationReady
    UNSUCCESSFUL OUTCOME    RadioLinkReconfigurationFailure
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
    CRITICALITY             reject
}

-- *** UnSynchronisedRadioLinkReconfiguration (FDD) ***
unSynchronisedRadioLinkReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationRequestFDD
    SUCCESSFUL OUTCOME      RadioLinkReconfigurationResponse
    UNSUCCESSFUL OUTCOME    RadioLinkReconfigurationFailure
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
    CRITICALITY             reject
}

-- *** UnSynchronisedRadioLinkReconfiguration (TDD) ***
unSynchronisedRadioLinkReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationRequestTDD
    SUCCESSFUL OUTCOME      RadioLinkReconfigurationResponse
    UNSUCCESSFUL OUTCOME    RadioLinkReconfigurationFailure
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
    CRITICALITY             reject
}

-- *** DedicatedMeasurementInitiation ***
dedicatedMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {

```

```

INITIATING MESSAGE      DedicatedMeasurementInitiationRequest
SUCCESSFUL OUTCOME      DedicatedMeasurementInitiationResponse
UNSUCCESSFUL OUTCOME    DedicatedMeasurementInitiationFailure
MESSAGE DISCRIMINATOR   dedicated
PROCEDURE ID            { procedureCode id-dedicatedMeasurementInitiation, ddMode common }
CRITICALITY             reject
}

-- *** PhysicalSharedChannelReconfiguration (TDD only) ***
physicalSharedChannelReconfiguration NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    PhysicalSharedChannelReconfigurationRequestTDD
  SUCCESSFUL OUTCOME    PhysicalSharedChannelReconfigurationResponseTDD
  UNSUCCESSFUL OUTCOME  PhysicalSharedChannelReconfigurationFailureTDD
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-physicalSharedChannelReconfiguration, ddMode tdd }
  CRITICALITY           reject
}

-- Class 2

-- *** ResourceStatusIndication ***
resourceStatusIndication NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    ResourceStatusIndication
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-resourceStatusIndication, ddMode common }
  CRITICALITY           ignore
}

-- *** AuditRequired ***
auditRequired NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    AuditRequiredIndication
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-auditRequired, ddMode common }
  CRITICALITY           ignore
}

-- *** CommonMeasurementReport ***
commonMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    CommonMeasurementReport
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-commonMeasurementReport, ddMode common }
  CRITICALITY           ignore
}

-- *** CommonMeasurementTermination ***
commonMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    CommonMeasurementTerminationRequest
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-commonMeasurementTermination, ddMode common }
  CRITICALITY           ignore
}

-- *** CommonMeasurementFailure ***

```

```
commonMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CommonMeasurementFailureIndication
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-commonMeasurementFailure, ddMode common }
  CRITICALITY             ignore
}

-- *** SynchronisedRadioLinkReconfirurationCommit ***
synchronisedRadioLinkReconfigurationCommit NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkReconfigurationCommit
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
  CRITICALITY             ignore
}

-- *** SynchronisedRadioReconfigurationCancellation ***
synchronisedRadioLinkReconfigurationCancellation NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkReconfigurationCancel
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common }
  CRITICALITY             ignore
}

-- *** RadioLinkFailure ***
radioLinkFailure NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkFailureIndication
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-radioLinkFailure, ddMode common }
  CRITICALITY             ignore
}

-- *** RadioLinkPreemption ***
radioLinkPreemption NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkPreemptionRequiredIndication
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-radioLinkPreemption, ddMode common }
  CRITICALITY             ignore
}

-- *** RadioLinkRestoration ***
radioLinkRestoration NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkRestoreIndication
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-radioLinkRestoration, ddMode common }
  CRITICALITY             ignore
}

-- *** DedicatedMeasurementReport ***
dedicatedMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      DedicatedMeasurementReport
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-dedicatedMeasurementReport, ddMode common }
  CRITICALITY             ignore
}
```

```
}

-- *** DedicatedMeasurementTermination ***
dedicatedMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      DedicatedMeasurementTerminationRequest
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-dedicatedMeasurementTermination, ddMode common }
  CRITICALITY             ignore
}

-- *** DedicatedMeasurementFailure ***
dedicatedMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      DedicatedMeasurementFailureIndication
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-dedicatedMeasurementFailure, ddMode common }
  CRITICALITY             ignore
}

-- *** DLPowerControl (FDD only) ***
downlinkPowerControlFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      DL-PowerControlRequest
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-downlinkPowerControl, ddMode fdd }
  CRITICALITY             ignore
}

-- *** DLPowerTimeslotControl (TDD only) ***
downlinkPowerTimeslotControl NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      DL-PowerTimeslotControlRequest
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
  CRITICALITY             ignore
}

-- *** CompressedModeCommand (FDD only) ***
compressedModeCommand NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CompressedModeCommand
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-compressedModeCommand, ddMode fdd }
  CRITICALITY             ignore
}

-- *** UnblockResourceIndication ***
unblockResource NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      UnblockResourceIndication
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-unblockResource, ddMode common }
  CRITICALITY             ignore
}

-- *** ErrorIndication for Dedicated procedures ***
errorIndicationForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      ErrorIndication
}
```



```

MESSAGE DISCRIMINATOR    dedicated
PROCEDURE ID              { procedureCode id-errorIndicationForDedicated, ddMode common }
CRITICALITY              ignore
}

-- *** ErrorIndication for Common procedures ***
errorIndicationForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     ErrorIndication
  MESSAGE DISCRIMINATOR  common
  PROCEDURE ID           { procedureCode id-errorIndicationForCommon, ddMode common }
  CRITICALITY            ignore
}

-- *** PrivateMessage for Dedicated procedures ***
privateMessageForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     PrivateMessage
  MESSAGE DISCRIMINATOR  dedicated
  PROCEDURE ID           { procedureCode id-privateMessageForDedicated, ddMode common }
  CRITICALITY            ignore
}

-- *** PrivateMessage for Common procedures ***
privateMessageForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     PrivateMessage
  MESSAGE DISCRIMINATOR  common
  PROCEDURE ID           { procedureCode id-privateMessageForCommon, ddMode common }
  CRITICALITY            ignore
}

END

```

9.3.3 PDU Definitions

```

-- *****
--
-- PDU definitions for NBAP.
--
-- *****

NBAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.

```

--
-- *****

IMPORTS

Active-Pattern-Sequence-Information,
AddorDeleteIndicator,
AICH-Power,
AICH-TransmissionTiming,
AllocationRetentionPriority,
APPreambleSignature,
APSubChannelNumber,
AvailabilityStatus,
BCCH-ModificationTime,
BindingID,
BlockingPriorityIndicator,
SCTD-Indicator,
Cause,
CCTrCH-ID,
CDSubChannelNumbers,
CellParameterID,
CFN,
Channel-Assignment-Indication,
ChipOffset,
C-ID,
Closedlooptimingadjustmentmode,
CommonChannelsCapacityConsumptionLaw,
Compressed-Mode-Deactivation-Flag,
CommonMeasurementType,
CommonMeasurementValue,
CommonMeasurementValueInformation,
CommonPhysicalChannelID,
Common-PhysicalChannel-Status-Information,
Common-TransportChannel-Status-Information,
CommonTransportChannelID,
CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue,
CriticalityDiagnostics,
CPCH-Allowed-Total-Rate,
CPCHScramblingCodeNumber,
CPCH-UL-DPCCH-SlotFormat,
CRNC-CommunicationContextID,
DCH-FDD-Information,
DCH-InformationResponse,
DCH-ID,
FDD-DCHs-to-Modify,
TDD-DCHs-to-Modify,
DCH-TDD-Information,
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,

DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-or-Global-CapacityCredit,
DL-Power,
DLPowerAveragingWindowSize,
DL-ScramblingCode,
DL-TimeslotISCP,
DL-Timeslot-Information,
DL-TimeslotISCPInfo,
DL-TPC-Pattern01Count,
DPCH-ID,
DSCH-ID,
DSCH-FDD-Information,
DSCH-InformationResponse,
DSCH-TDD-Information,
End-Of-Audit-Sequence-Indicator,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FrameHandlingPriority,
FrameOffset,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,
IB-Type,
IndicationType,
InnerLoopDLPCStatus,
LimitedPowerIncrease,
Local-Cell-ID,
MaximumDL-PowerCapability,
MaximumTransmissionPower,
Max-Number-of-PCPCHes,
MaxNrOfUL-DPDCHs,
MaxPRACH-MidambleShifts,
MeasurementFilterCoefficient,
MeasurementID,
MidambleShiftAndBurstType,
MinimumDL-PowerCapability,
MinSpreadingFactor,
MinUL-ChannelisationCodeLength,
MultiplexingPosition,
NEOT,
NFmax,
N-INSYNC-IND,
N-OUTSYNC-IND,
NodeB-CommunicationContextID,
NStartMessage,
PagingIndicatorLength,

PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PCP-Length,
PDSCH-CodeMapping,
PDSCHSet-ID,
PDSCH-ID,
PICH-Mode,
PICH-Power,
PowerAdjustmentType,
PowerOffset,
PowerRaiseLimit,
PRACH-Midamble,
PreambleSignatures,
PreambleThreshold,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
SCH-TimeSlot,
PunctureLimit,
PUSCHSet-ID,
PUSCH-ID,
QE-Selector,
RACH-SlotFormat,
RACH-SubChannelNumbers,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
ResourceOperationalState,
RL-Set-ID,
RL-ID,
Received-total-wide-band-power-Value,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
ScramblingCodeNumber,
SecondaryCCPCH-SlotFormat,
Segment-Type,
S-FieldLength,
SFN,
ShutdownTimer,
SIB-Originator,
SpecialBurstScheduling,
SSDT-Cell-Identity,
SSDT-CellID-Length,
SSDT-Indication,
Start-Of-Audit-Sequence-Indicator,
STTD-Indicator,
SSDT-SupportIndicator,
SyncCase,
T-Cell,
T-RLFAILURE,
TDD-ChannelisationCode,
TDD-DPCHOffset,

```
TDD-TPC-DownlinkStepSize,  
TDD-PhysicalChannelOffset,  
TFCI2-BearerInformationResponse,  
TFCI-Coding,  
TFCI-Presence,  
TFCI-SignallingMode,  
TFCS,  
TimeSlot,  
TimeSlotDirection,  
TimeSlotStatus,  
TimingAdvanceApplied,  
ToAWE,  
ToAWS,  
TransmissionDiversityApplied,  
TransmitDiversityIndicator,  
TransmissionGapPatternSequenceCodeInformation,  
Transmission-Gap-Pattern-Sequence-Information,  
TransportBearerRequestIndicator,  
TransportFormatSet,  
TransportLayerAddress,  
TSTD-Indicator,  
UARFCN,  
USCH-Information,  
USCH-InformationResponse,  
UL-CapacityCredit,  
UL-DPCCH-SlotFormat,  
UL-SIR,  
UL-FP-Mode,  
UL-PhysCH-SF-Variation,  
UL-ScramblingCode,  
UL-Timeslot-Information,  
UL-TimeSlot-ISCP-Info,  
UL-TimeslotISCP-Value,  
UL-TimeslotISCP-Value-IncrDecrThres,  
USCH-ID  
FROM NBAP-IEs  
  
PrivateIE-Container{ },  
ProtocolExtensionContainer{ },  
ProtocolIE-Container{ },  
ProtocolIE-Single-Container{ },  
ProtocolIE-ContainerList{ },  
NBAP-PRIVATE-IES,  
NBAP-PROTOCOL-IES,  
NBAP-PROTOCOL-EXTENSION  
FROM NBAP-Containers  
  
id-Active-Pattern-Sequence-Information,  
id-AdjustmentRatio,  
id-AICH-Information,  
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,  
id-AP-AICH-Information,  
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
```

id-BCH-Information,
id-BCCH-ModificationTime,
id-BlockingPriorityIndicator,
id-Cause,
id-CauseLevel-PSCH-ReconfFailureTDD,
id-CauseLevel-RL-AdditionFailureFDD,
id-CauseLevel-RL-AdditionFailureTDD,
id-CauseLevel-RL-ReconfFailure,
id-CauseLevel-RL-SetupFailureFDD,
id-CauseLevel-RL-SetupFailureTDD,
id-CCP-InformationItem-AuditRsp,
id-CCP-InformationList-AuditRsp,
id-CCP-InformationItem-ResourceStatusInd,
id-CCTrCH-InformationItem-RL-FailureInd,
id-CCTrCH-InformationItem-RL-RestoreInd,
id-CDCA-ICH-Information,
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-Cell-InformationItem-AuditRsp,
id-Cell-InformationItem-ResourceStatusInd,
id-Cell-InformationList-AuditRsp,
id-CellParameterID,
id-CFN,
id-CFNReportingIndicator,
id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD,
id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID,
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-CPCH-Information,
id-CPCH-Parameters-CTCH-SetupRsp,
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,

id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-TPC-Pattern01Count,
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteList-RL-ReconfPrepFDD,
id-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-TDD-Information,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-End-Of-Audit-Sequence-Indicator,
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRqstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstTDD,
id-IndicationType-ResourceStatusInd,
id-InitDL-Power,
id-InnerLoopDLPCStatus,
id-Limited-power-increase-information-Cell-SetupRqstFDD,

id-Local-Cell-ID,
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp,
id-Local-Cell-InformationItem-ResourceStatusInd,
id-Local-Cell-InformationItem2-ResourceStatusInd,
id-Local-Cell-InformationList-AuditRsp,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MaximumTransmissionPower,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,
id-NodeB-CommunicationContextID,
id-P-CCPCH-Information,
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRqstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRqstTDD,
id-PCH-Parameters-CTCH-SetupRsp,
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstTDD,
id-PCH-Information,
id-PCPCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRqstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PDSCHSets-AddList-PSCH-ReconfRqst,
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRqstTDD,
id-PICH-ParametersItem-CTCH-SetupRqstTDD,
id-PowerAdjustmentType,
id-PRACH-Information,
id-PRACHConstant,
id-PRACH-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRqstFDD,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,
id-PrimarySCH-Information-Cell-SetupRqstFDD,
id-PrimaryScramblingCode,
id-SCH-Information-Cell-ReconfRqstTDD,
id-SCH-Information-Cell-SetupRqstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,

id-PUSCHConstant,
id-PUSCHSets-AddList-PSCH-ReconfRqst,
id-PUSCHSets-DeleteList-PSCH-ReconfRqst,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,
id-RACH-ParametersItem-CTCH-SetupRqstFDD,
id-RACH-ParameterItem-CTCH-SetupRqstTDD,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRqstFDD,
id-RL-informationItem-RL-DeletionRqst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
id-RL-InformationItem-RL-RestoreInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-informationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRqstFDD,
id-RL-InformationList-RL-SetupRqstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-ReconfRqstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-S-CCPCH-Information,
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,

id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-SecondarySCH-Information-Cell-ReconfRqstFDD,
id-SecondarySCH-Information-Cell-SetupRqstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH,
id-T-Cell,
id-TFCI2-Bearer-Information-RL-SetupRqstFDD,
id-TFCI2-BearerInformationResponse,
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-TimeslotISCPInfo,
id-TimingAdvanceApplied,
id-TransmissionDiversityApplied,
id-UARFCNforNt,
id-UARFCNforNd,
id-UARFCNforNu,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-UL-DPCH-InformationList-RL-SetupRqstTDD,
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD,

```

id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,
id-USCH-Information-Add,
id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
id-USCH-InformationResponse,
id-USCH-Information,

```

```

maxNrOfCCTrCHs,
maxNrOfCodes,
maxNrOfCPCHs,
maxNrOfDCHs,
maxNrOfDLTSs,
maxNrOfDPCHs,
maxNrOfDSCHs,
maxNrOfFACHs,
maxNrOfRLs,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfRLSets,
maxNrOfPCPCHs,
maxNrOfPDSCHs,
maxNrOfPUSCHs,
maxNrOfPDSCHSets,
maxNrOfPUSCHSets,
maxNrOfSCCPCHs,
maxNrOfULTSs,
maxNrOfUSCHs,
maxAPSigNum,
maxCPCHCell,
maxFACHCell,
maxNoofLen,
maxRACHCell,
maxPCPCHCell,
maxPRACHCell,
maxSCCPCHCell,
maxSCPICHCell,
maxCellinNodeB,
maxCCPinNodeB,
maxCommunicationContext,
maxLocalCellinNodeB,
maxNrOfSlotFormatsPRACH,
maxIB,
maxIBSEG

```

FROM NBAP-Constants;

```

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP REQUEST FDD
--
-- *****

```

```

CommonTransportChannelSetupRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelSetupRequestFDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CommonTransportChannelSetupRequestFDD-Extensions}}  OPTIONAL,
    ...
}

CommonTransportChannelSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonTransportChannelSetupRequestFDD-IEs NBAP-PROTOCOL-IEs ::= {
    { ID      id-C-ID                CRITICALITY  reject      TYPE  C-ID                PRESENCE
      mandatory }|
    { ID      id-ConfigurationGenerationID  CRITICALITY  reject      TYPE  ConfigurationGenerationID  PRESENCE
      mandatory }|
    { ID      id-CommonPhysicalChannelType-CTCH-SetupRqstFDD  CRITICALITY  ignore     TYPE  CommonPhysicalChannelType-CTCH-SetupRqstFDD
      PRESENCE  mandatory },
    ...
}

CommonPhysicalChannelType-CTCH-SetupRqstFDD ::= CHOICE {
    secondary-CCPCH-parameters  Secondary-CCPCH-CTCH-SetupRqstFDD,
    pRACH-parameters            PRACH-CTCH-SetupRqstFDD,
    pCPCHes-parameters          PCPCH-CTCH-SetupRqstFDD,
    ...
}

Secondary-CCPCH-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    fdd-S-CCPCH-Offset           FDD-S-CCPCH-Offset,
    dl-ScramblingCode            DL-ScramblingCode  OPTIONAL,
    -- This IE shall be present if the PCH Parameters IE is not present
    fdd-DL-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
    tFCS                          TFCS,
    secondary-CCPCH-SlotFormat     SecondaryCCPCH-SlotFormat,
    tFCI-Presence                 TFCI-Presence  OPTIONAL,
    -- This IE shall be present only if the Secondary CCPCH Slot Format IE is set to any of the values from 8 to 17
    multiplexingPosition          MultiplexingPosition,
    powerOffsetInformation         PowerOffsetInformation-CTCH-SetupRqstFDD,
    sTTD-Indicator               STTD-Indicator,
    fACH-Parameters              FACH-ParametersList-CTCH-SetupRqstFDD  OPTIONAL,
    pCH-Parameters              PCH-Parameters-CTCH-SetupRqstFDD  OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-SetupRqstFDD-ExtIEs} }  OPTIONAL,
    ...
}

Secondary-CCPCHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PowerOffsetInformation-CTCH-SetupRqstFDD ::= SEQUENCE {
    p01-ForTFCI-Bits             PowerOffset,

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```

    pO3-ForPilotBits          PowerOffset,
    iE-Extensions             ProtocolExtensionContainer { { PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-ParametersList-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstFDD }}

FACH-ParametersListIEs-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-SetupRqstFDD    CRITICALITY reject    TYPE FACH-ParametersListIE-CTCH-SetupRqstFDD PRESENCE mandatory }
}

FACH-ParametersListIE-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstFDD

FACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    transportFormatSet           TransportFormatSet,
    toAWS                         ToAWS,
    toAWE                         ToAWE,
    maxFACH-Power                DL-Power,
    iE-Extensions                ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

FACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRqstFDD }}

PCH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersItem-CTCH-SetupRqstFDD    CRITICALITY reject    TYPE PCH-ParametersItem-CTCH-SetupRqstFDD PRESENCE mandatory }
}

PCH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    transportFormatSet           TransportFormatSet,
    toAWS                         ToAWS,
    toAWE                         ToAWE,
    pCH-Power                    DL-Power,
    pICH-Parameters              PICH-Parameters-CTCH-SetupRqstFDD,
    iE-Extensions                ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PCH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

PICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    fdd-dl-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
    pICH-Power                       PICH-Power,
    pICH-Mode                         PICH-Mode,
    sTTD-Indicator                   STTD-Indicator,
    iE-Extensions                     ProtocolExtensionContainer { { PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PRACH-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    scramblingCodeNumber             ScramblingCodeNumber,
    tFCS                             TFCS,
    preambleSignatures               PreambleSignatures,
    allowedSlotFormatInformationList AllowedSlotFormatInformationList-CTCH-SetupRqstFDD,
    rACH-SubChannelNumbers           RACH-SubChannelNumbers,
    ul-punctureLimit                 PunctureLimit,
    preambleThreshold                PreambleThreshold,
    rACH-Parameters                  RACH-Parameters-CTCH-SetupRqstFDD,
    aICH-Parameters                  AICH-Parameters-CTCH-SetupRqstFDD,
    iE-Extensions                     ProtocolExtensionContainer { { PRACHItem-CTCH-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

PRACHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AllowedSlotFormatInformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD

AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    rACHSlotFormat                   RACH-SlotFormat,
    iE-Extensions                     ProtocolExtensionContainer { { AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD-ExtIEs} }
    OPTIONAL,
    ...
}

AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RACH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ RACH-ParametersIE-CTCH-SetupRqstFDD }}

RACH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RACH-ParametersItem-CTCH-SetupRqstFDD    CRITICALITY reject    TYPE RACH-ParametersItem-CTCH-SetupRqstFDD    PRESENCE mandatory }
}

```

```

RACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    transportFormatSet            TransportFormatSet,
    iE-Extensions                  ProtocolExtensionContainer { { RACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

RACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

AICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    aICH-TransmissionTiming      AICH-TransmissionTiming,
    fdd-dl-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    aICH-Power                    AICH-Power,
    sTTD-Indicator                STTD-Indicator,
    iE-Extensions                  ProtocolExtensionContainer { { AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

PCPCH-CTCH-SetupRqstFDD ::= SEQUENCE {
    cPCH-Parameters              CPCH-Parameters-CTCH-SetupRqstFDD,
    iE-Extensions                  ProtocolExtensionContainer { { PCPCHItem-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

PCPCHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

CPCH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    transportFormatSet            TransportFormatSet,
    aPPreambleScramblingCode      CPCHScramblingCodeNumber,
    cDPreambleScramblingCode      CPCHScramblingCodeNumber,
    tFCS                           TFCS,
    cDSignatures                    PreambleSignatures          OPTIONAL,
    cDSubChannelNumbers            CDSUBChannelNumbers        OPTIONAL,
    punctureLimit                  PunctureLimit,
    cPCH-UL-DPCCH-SlotFormat      CPCH-UL-DPCCH-SlotFormat,
    uL-SIR                          UL-SIR,
    initialDL-transmissionPower    DL-Power,
    maximumDLPower                 DL-Power,
    minimumDLPower                 DL-Power,
    pO2-ForTPC-Bits                PowerOffset,
    fDD-TPC-DownlinkStepSize       FDD-TPC-DownlinkStepSize,
    nStartMessage                  NStartMessage,
    nEOT                             NEOT,
}

```

```

channel-Assignment-Indication Channel-Assignment-Indication,
cPCH-Allowed-Total-Rate      CPCH-Allowed-Total-Rate,
pCPCHChannelInformationList-CTCH-SetupRqstFDD,
pCPCHChannelInformationList-CTCH-SetupRqstFDD
vCAMMapping-Information      VCAMMapping-InformationList-CTCH-SetupRqstFDD      OPTIONAL,
-- this IE shall be present if the Channel Assignment Indication IE is set to "CA Active" --
aP-AICH-Parameters           AP-AICH-Parameters-CTCH-SetupRqstFDD,
cDCA-ICH-Parameters          CDCA-ICH-Parameters-CTCH-SetupRqstFDD,
iE-Extensions                ProtocolExtensionContainer { { CPCH-Parameters-CTCH-SetupRqstFDD-ExtIEs } }      OPTIONAL,
...
}

CPCH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PCPCHChannelInformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfPCPCHs)) OF PCPCHChannelInformationItem-CTCH-SetupRqstFDD

PCPCHChannelInformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
commonPhysicalChannelID      CommonPhysicalChannelID,
cPCHScramblingCodeNumber     CPCHScramblingCodeNumber,
dl-ScramblingCode            DL-ScramblingCode,
fdd-dl-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
pcp-Length                    PCP-Length,
ucsm-Information              UCSM-Information-CTCH-SetupRqstFDD      OPTIONAL,
-- this IE shall be present if the Channel Assignment Indication IE is set to "CA Inactive" --
iE-Extensions                ProtocolExtensionContainer { { PCPCHChannelInformationItem-CTCH-SetupRqstFDD-ExtIEs } }      OPTIONAL,
...
}

PCPCHChannelInformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

UCSM-Information-CTCH-SetupRqstFDD ::= SEQUENCE {
minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength,
nFmax                           NFmax,
channelRequestParametersList-CTCH-SetupRqstFDD      OPTIONAL,
iE-Extensions                  ProtocolExtensionContainer { { UCSM-InformationItem-CTCH-SetupRqstFDD-ExtIEs } }      OPTIONAL,
...
}

UCSM-InformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

ChannelRequestParametersList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxAPSigNum)) OF ChannelRequestParametersItem-CTCH-SetupRqstFDD

ChannelRequestParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
aPPreambleSignature           APreambleSignature,
aPSubChannelNumber            ASubChannelNumber      OPTIONAL,
iE-Extensions                 ProtocolExtensionContainer { { ChannelRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs } }      OPTIONAL,
...
}

```



```

ChannelRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

VCAMMapping-InformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNoofLen)) OF VCAMMapping-InformationItem-CTCH-SetupRqstFDD

VCAMMapping-InformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    minUL-ChannelisationCodeLength      MinUL-ChannelisationCodeLength,
    nFmax                                NFmax,
    max-Number-of-PCPCHes                Max-Number-of-PCPCHes,
    sFrequestParameters                  SFrequestParametersList-CTCH-SetupRqstFDD,
    iE-Extensions                        ProtocolExtensionContainer { { VCAMMapping-InformationItem-CTCH-SetupRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

VCAMMapping-InformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFrequestParametersList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxAPSigNum)) OF SFrequestParametersItem-CTCH-SetupRqstFDD

SFrequestParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    aPPreambleSignature                  APPreambleSignature,
    aPSubChannelNumber                   APSubChannelNumber    OPTIONAL,
    iE-Extensions                        ProtocolExtensionContainer { { SFrequestParametersItem-CTCH-SetupRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

SFrequestParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AP-AICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID              CommonPhysicalChannelID,
    fdd-dl-ChannelisationCodeNumber      FDD-DL-ChannelisationCodeNumber,
    aP-AICH-Power                         AICH-Power,
    cSICH-Power                           AICH-Power,
    sTTD-Indicator                        STTD-Indicator,
    iE-Extensions                        ProtocolExtensionContainer { { AP-AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

AP-AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CDCA-ICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID              CommonPhysicalChannelID,
    fdd-dl-ChannelisationCodeNumber      FDD-DL-ChannelisationCodeNumber,
    cDCA-ICH-Power                        AICH-Power,
    sTTD-Indicator                        STTD-Indicator,
    iE-Extensions                        ProtocolExtensionContainer { { CDCA-ICH-Parameters-CTCH-SetupRqstFDD-ExtIEs } }    OPTIONAL,
}

```

```

}
...
}
CDCA-ICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP REQUEST TDD
--
-- *****

CommonTransportChannelSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelSetupRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{CommonTransportChannelSetupRequestTDD-Extensions}}  OPTIONAL,
    ...
}

CommonTransportChannelSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-C-ID                CRITICALITY reject      TYPE C-ID                PRESENCE
      mandatory }|
    { ID    id-ConfigurationGenerationID  CRITICALITY reject      TYPE ConfigurationGenerationID  PRESENCE
      mandatory }|
    { ID    id-CommonPhysicalChannelType-CTCH-SetupRqstTDD  CRITICALITY ignore      TYPE CommonPhysicalChannelType-CTCH-SetupRqstTDD
      PRESENCE mandatory }|
    ...
}

CommonTransportChannelSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

CommonPhysicalChannelType-CTCH-SetupRqstTDD ::= CHOICE {
    secondary-CCPCH-parameters      Secondary-CCPCH-CTCH-SetupRqstTDD,
    pRACH-parameters                PRACH-CTCH-SetupRqstTDD,
    ...
}

Secondary-CCPCH-CTCH-SetupRqstTDD ::= SEQUENCE {
    sCCPCH-CCTrCH-ID                CCTrCH-ID,
    tFCS                             TFCS,
    tFCI-Coding                      TFCI-Coding,
    punctureLimit                    PunctureLimit,
    secondaryCCPCH-parameterList     Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD,
    fACH-ParametersList              FACH-ParametersList-CTCH-SetupRqstTDD  OPTIONAL,
    pCH-Parameters                   PCH-Parameters-CTCH-SetupRqstTDD  OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer  {{Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs}}  OPTIONAL,
    ...
}

Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

}

Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD }}

Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD  CRITICALITY reject  TYPE Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD  PRESENCE
  mandatory }
}

Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD

Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID          CommonPhysicalChannelID,
  tdd-ChannelisationCode           TDD-ChannelisationCode,
  timeslot                         Timeslot,
  midambleShiftandBurstType        MidambleShiftAndBurstType,
  tdd-PhysicalChannelOffset         TDD-PhysicalChannelOffset,
  repetitionPeriod                 RepetitionPeriod,
  repetitionLength                 RepetitionLength,
  s-CCPCH-Power                    DL-Power,
  iE-Extensions                    ProtocolExtensionContainer { { Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

FACH-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstTDD }}

FACH-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-ParametersListIE-CTCH-SetupRqstTDD  CRITICALITY reject  TYPE FACH-ParametersListIE-CTCH-SetupRqstTDD  PRESENCE mandatory }
}

FACH-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstTDD

FACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonTransportChannelID         CommonTransportChannelID,
  fACH-CCTrCH-ID                   CCTrCH-ID,
  dl-TransportFormatSet            TransportFormatSet,
  toAWS                            ToAWS,
  toAWE                            ToAWE,
  iE-Extensions                    ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PCH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRqstTDD }}

PCH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {

```

```

}
{ ID id-PCH-ParametersItem-CTCH-SetupRqstTDD    CRITICALITY reject    TYPE PCH-ParametersItem-CTCH-SetupRqstTDD    PRESENCE mandatory }
}

PCH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonTransportChannelID          CommonTransportChannelID,
    pCH-CCTrCH-ID                     CCTrCH-ID,
    dl-TransportFormatSet              TransportFormatSet,
    toAWS                              ToAWS,
    toAWE                              ToAWE,
    pICH-Parameters                   PICH-Parameters-CTCH-SetupRqstTDD,
    iE-Extensions                     ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PICH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-SetupRqstTDD }}

PICH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PICH-ParametersItem-CTCH-SetupRqstTDD    CRITICALITY reject    TYPE PICH-ParametersItem-CTCH-SetupRqstTDD    PRESENCE mandatory }
}

PICH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    tdd-ChannelisationCode           TDD-ChannelisationCode,
    timeSlot                          TimeSlot,
    midambleShiftAndBurstType        MidambleShiftAndBurstType,
    tdd-PhysicalChannelOffset         TDD-PhysicalChannelOffset,
    repetitionPeriod                  RepetitionPeriod,
    repetitionLength                  RepetitionLength,
    pagingIndicatorLength             PagingIndicatorLength,
    pICH-Power                        PICH-Power,
    iE-Extensions                     ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PRACH-CTCH-SetupRqstTDD ::= SEQUENCE {
    pRACH-Parameters-CTCH-SetupRqstTDD    PRACH-Parameters-CTCH-SetupRqstTDD,
    iE-Extensions                         ProtocolExtensionContainer { { PRACH-CTCH-SetupRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PRACH-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PRACH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersIE-CTCH-SetupRqstTDD }}

```

```

PRACH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-ParametersItem-CTCH-SetupRqstTDD  CRITICALITY reject  TYPE PRACH-ParametersItem-CTCH-SetupRqstTDD  PRESENCE mandatory }
}

```

```

PRACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,
  tFCS                          TFCS,
  timeslot                      TimeSlot,
  tdd-ChannelisationCode       TDD-ChannelisationCode,
  maxPRACH-MidambleShifts     MaxPRACH-MidambleShifts,
  pRACH-Midamble               PRACH-Midamble,
  rACH                          RACH-Parameter-CTCH-SetupRqstTDD,
  iE-Extensions                ProtocolExtensionContainer  { { PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

```

```

PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

RACH-Parameter-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container  {{ RACH-ParameterIE-CTCH-SetupRqstTDD }}

```

```

RACH-ParameterIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-ParameterItem-CTCH-SetupRqstTDD  CRITICALITY reject  TYPE RACH-ParameterItem-CTCH-SetupRqstTDD  PRESENCE mandatory }
}

```

```

RACH-ParameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonTransportChannelID      CommonTransportChannelID,
  uL-TransportFormatSet        TransportFormatSet,
  iE-Extensions                ProtocolExtensionContainer  { { RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

```

```

RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP RESPONSE
--
-- *****

```

```

CommonTransportChannelSetupResponse ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{CommonTransportChannelSetupResponse-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{CommonTransportChannelSetupResponse-Extensions}}  OPTIONAL,
  ...
}

```

```

CommonTransportChannelSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-ParametersList-CTCH-SetupRsp  CRITICALITY ignore  TYPE FACH-CommonTransportChannel-InformationResponse  PRESENCE optional }|
}

```

```

    { ID      id-PCH-Parameters-CTCH-SetupRsp      CRITICALITY ignore      TYPE      CommonTransportChannel-InformationResponse      PRESENCE
      optional    }|
    { ID      id-RACH-Parameters-CTCH-SetupRsp      CRITICALITY ignore      TYPE      CommonTransportChannel-InformationResponse      PRESENCE
      optional    }|
    { ID      id-CPCH-Parameters-CTCH-SetupRsp      CRITICALITY ignore      TYPE      CommonTransportChannel-InformationResponse
      PRESENCE optional    }|
    { ID      id-CriticalityDiagnostics              CRITICALITY ignore      TYPE      CriticalityDiagnostics              PRESENCE
      optional    },
    ...
}

CommonTransportChannelSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-CommonTransportChannel-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF CommonTransportChannel-InformationResponse

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP FAILURE
--
-- *****

CommonTransportChannelSetupFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelSetupFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelSetupFailure-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-Cause          CRITICALITY ignore      TYPE      Cause          PRESENCE mandatory    }|
    { ID      id-CriticalityDiagnostics CRITICALITY ignore      TYPE      CriticalityDiagnostics PRESENCE optional    },
    ...
}

CommonTransportChannelSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST FDD
--
-- *****

CommonTransportChannelReconfigurationRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelReconfigurationRequestFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestFDD-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY reject      TYPE      C-ID          PRESENCE mandatory    }|

```

```

    { ID id-ConfigurationGenerationID          CRITICALITY reject      TYPE ConfigurationGenerationID          PRESENCE mandatory }|
    { ID id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD CRITICALITY reject TYPE CommonPhysicalChannelType-CTCH-ReconfRqstFDD PRESENCE
    mandatory },
    ...
}

CommonTransportChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonPhysicalChannelType-CTCH-ReconfRqstFDD ::= CHOICE {
    secondary-CCPCH-parameters      Secondary-CCPCHList-CTCH-ReconfRqstFDD,
    pRACH-parameters                PRACHList-CTCH-ReconfRqstFDD,
    cPCH-parameters                 CPCHList-CTCH-ReconfRqstFDD,
    ...
}

Secondary-CCPCHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
    fACH-ParametersList-CTCH-ReconfRqstFDD      FACH-ParametersList-CTCH-ReconfRqstFDD OPTIONAL,
    pCH-Parameters-CTCH-ReconfRqstFDD          PCH-Parameters-CTCH-ReconfRqstFDD      OPTIONAL,
    pICH-Parameters-CTCH-ReconfRqstFDD        PICH-Parameters-CTCH-ReconfRqstFDD    OPTIONAL,
    iE-Extensions                             ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container { { FACH-ParametersListIEs-CTCH-ReconfRqstFDD } }

FACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-ReconfRqstFDD      CRITICALITY reject      TYPE FACH-ParametersListIE-CTCH-ReconfRqstFDD      PRESENCE mandatory }
}

FACH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxFACHCell)) OF FACH-ParametersItem-CTCH-ReconfRqstFDD

FACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID          CommonTransportChannelID,
    maxFACH-Power                    DL-Power          OPTIONAL,
    toAWS                             ToAWS             OPTIONAL,
    toAWE                             ToAWE             OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

FACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCH-Parameters-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container { { PCH-ParametersIE-CTCH-ReconfRqstFDD } }

PCH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {

```

```

    { ID id-PCH-ParametersItem-CTCH-ReconfRqstFDD CRITICALITY reject TYPE PCH-ParametersItem-CTCH-ReconfRqstFDD PRESENCE mandatory }
  }

PCH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
  commonTransportChannelID CommonTransportChannelID,
  pCH-Power DL-Power OPTIONAL,
  toAWS ToAWS OPTIONAL,
  toAWE ToAWE OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

PCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PICH-Parameters-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-ReconfRqstFDD }}

PICH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-ParametersItem-CTCH-ReconfRqstFDD CRITICALITY reject TYPE PICH-ParametersItem-CTCH-ReconfRqstFDD PRESENCE mandatory }
}

PICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  pICH-Power PICH-Power OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PRACHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
  pRACH-ParametersList-CTCH-ReconfRqstFDD PRACH-ParametersList-CTCH-ReconfRqstFDD OPTIONAL,
  aICH-ParametersList-CTCH-ReconfRqstFDD AICH-ParametersList-CTCH-ReconfRqstFDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { PRACH-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

PRACH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PRACH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersListIEs-CTCH-ReconfRqstFDD }}

PRACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject TYPE PRACH-ParametersListIE-CTCH-ReconfRqstFDD PRESENCE mandatory }
}

PRACH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF PRACH-ParametersItem-CTCH-ReconfRqstFDD

PRACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {

```



```

commonPhysicalChannelID          CommonPhysicalChannelID,
preambleSignatures                PreambleSignatures          OPTIONAL,
allowedSlotFormatInformationList  AllowedSlotFormatInformationList-CTCH-ReconfRqstFDD  OPTIONAL,
rACH-SubChannelNumbers           RACH-SubChannelNumbers    OPTIONAL,
iE-Extensions                     ProtocolExtensionContainer { { PRACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs} }  OPTIONAL,
...
}

PRACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

AllowedSlotFormatInformationList-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-
ReconfRqstFDD

AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
rACH-SlotFormat                   RACH-SlotFormat,
iE-Extensions                     ProtocolExtensionContainer { { AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD-ExtIEs} }
OPTIONAL,
...
}

AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

AICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container { { AICH-ParametersListIEs-CTCH-ReconfRqstFDD } }

AICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
{ ID id-AICH-ParametersListIE-CTCH-ReconfRqstFDD    CRITICALITY reject TYPE AICH-ParametersListIE-CTCH-ReconfRqstFDD PRESENCE mandatory }
}

AICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF AICH-ParametersItem-CTCH-ReconfRqstFDD

AICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
commonPhysicalChannelID          CommonPhysicalChannelID,
aICH-Power                       AICH-Power              OPTIONAL,
iE-Extensions                     ProtocolExtensionContainer { { AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs} }  OPTIONAL,
...
}

AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

CPCHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
cPCH-ParametersList-CTCH-ReconfRqstFDD          CPCH-ParametersList-CTCH-ReconfRqstFDD          OPTIONAL,
aP-AICH-ParametersList-CTCH-ReconfRqstFDD      AP-AICH-ParametersList-CTCH-ReconfRqstFDD      OPTIONAL,
cDCA-ICH-ParametersList-CTCH-ReconfRqstFDD     CDCA-ICH-ParametersList-CTCH-ReconfRqstFDD     OPTIONAL,
iE-Extensions                                  ProtocolExtensionContainer { { CPCHListItem-CTCH-ReconfRqstFDD-ExtIEs} }  OPTIONAL,
...
}

```

```

CPCHListItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ CPCH-ParametersListIEs-CTCH-ReconfRqstFDD }}

CPCH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD    CRITICALITY reject    TYPE CPCH-ParametersListIE-CTCH-ReconfRqstFDD    PRESENCE mandatory }
}

CPCH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF CPCH-ParametersItem-CTCH-ReconfRqstFDD

CPCH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    uL-SIR                          UL-SIR                OPTIONAL,
    initialDL-transmissionPower     DL-Power          OPTIONAL,
    maximumDLPower                  DL-Power          OPTIONAL,
    minimumDLPower                  DL-Power          OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { CPCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

CPCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AP-AICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ AP-AICH-ParametersListIEs-CTCH-ReconfRqstFDD }}

AP-AICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject    TYPE AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD    PRESENCE mandatory }
}

AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF AP-AICH-ParametersItem-CTCH-ReconfRqstFDD

AP-AICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID        CommonPhysicalChannelID,
    aP-AICH-Power                  AICH-Power        OPTIONAL,
    cSICH-Power                    AICH-Power        OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { AP-AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

AP-AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CDCA-ICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ CDCA-ICH-ParametersListIEs-CTCH-ReconfRqstFDD }}

CDCA-ICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD    CRITICALITY reject    TYPE CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD    PRESENCE
    mandatory }
}

```

```

CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF CDCA-ICH-ParametersItem-CTCH-ReconfRqstFDD

CDCA-ICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    cDCA-ICH-Power                   AICH-Power          OPTIONAL,
    iE-Extensions                     ProtocolExtensionContainer { { CDCA-ICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

CDCA-ICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****

CommonTransportChannelReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container   {{CommonTransportChannelReconfigurationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestTDD-Extensions}} OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY reject      TYPE      C-ID          PRESENCE
    mandatory }|
    { ID id-ConfigurationGenerationID          CRITICALITY reject      TYPE      ConfigurationGenerationID          PRESENCE
    mandatory }|
    { ID id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD          CRITICALITY reject      TYPE      Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD
    PRESENCE optional }|
    { ID id-PICH-Parameters-CTCH-ReconfRqstTDD          CRITICALITY reject      TYPE      PICH-Parameters-CTCH-ReconfRqstTDD          PRESENCE optional }|
    { ID id-FACH-ParametersList-CTCH-ReconfRqstTDD          CRITICALITY reject      TYPE      FACH-ParametersList-CTCH-ReconfRqstTDD          PRESENCE optional }|
    { ID id-PCH-Parameters-CTCH-ReconfRqstTDD          CRITICALITY reject      TYPE      PCH-Parameters-CTCH-ReconfRqstTDD          PRESENCE optional },
    ...
}

CommonTransportChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    secondaryCCPCHList          Secondary-CCPCHList-CTCH-ReconfRqstTDD          OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCH-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

Secondary-CCPCHList-CTCH-ReconfRqstTDD ::= ProtocolIE-Single-Container { { Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD } }

Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD    CRITICALITY reject  TYPE Secondary-CCPCHListIE-CTCH-ReconfRqstTDD    PRESENCE mandatory }
}

Secondary-CCPCHListIE-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCHItem-CTCH-ReconfRqstTDD

Secondary-CCPCHItem-CTCH-ReconfRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,
  sCCPCH-Power                 DL-Power          OPTIONAL,
  iE-Extensions                ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
  ...
}

Secondary-CCPCHItem-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PICH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,
  pICH-Power                   PICH-Power          OPTIONAL,
  iE-Extensions                ProtocolExtensionContainer { { PICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
  ...
}

PICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

FACH-ParametersList-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-ReconfRqstTDD

FACH-ParametersItem-CTCH-ReconfRqstTDD ::= SEQUENCE {
  commonTransportChannelID     CommonTransportChannelID,
  toAWS                        ToAWS          OPTIONAL,
  toAWE                        ToAWE          OPTIONAL,
  iE-Extensions                ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
  ...
}

FACH-ParametersItem-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PCH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
  commonTransportChannelID     CommonTransportChannelID,
  toAWS                        ToAWS          OPTIONAL,
  toAWE                        ToAWE          OPTIONAL,
  iE-Extensions                ProtocolExtensionContainer { { PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
  ...
}

PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE
--
-- *****

CommonTransportChannelReconfigurationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelReconfigurationResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelReconfigurationResponse-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CriticalityDiagnostics    CRITICALITY    ignore    TYPE    CriticalityDiagnostics    PRESENCE optional},
    ...
}

CommonTransportChannelReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE
--
-- *****

CommonTransportChannelReconfigurationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelReconfigurationFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelReconfigurationFailure-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-Cause                    CRITICALITY ignore    TYPE    Cause                    PRESENCE mandatory }|
    { ID    id-CriticalityDiagnostics    CRITICALITY ignore    TYPE    CriticalityDiagnostics    PRESENCE optional },
    ...
}

CommonTransportChannelReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL DELETION REQUEST
--
-- *****

CommonTransportChannelDeletionRequest ::= SEQUENCE {

```

```

    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelDeletionRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelDeletionRequest-Extensions}}      OPTIONAL,
    ...
}

CommonTransportChannelDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-C-ID                CRITICALITY reject      TYPE      C-ID                PRESENCE  mandatory }|
  { ID      id-CommonPhysicalChannelID  CRITICALITY reject      TYPE      CommonPhysicalChannelID  PRESENCE  mandatory }|
  { ID      id-ConfigurationGenerationID  CRITICALITY reject      TYPE      ConfigurationGenerationID PRESENCE  mandatory },
  ...
}

CommonTransportChannelDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL DELETION RESPONSE
--
-- *****

CommonTransportChannelDeletionResponse ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{CommonTransportChannelDeletionResponse-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelDeletionResponse-Extensions}}      OPTIONAL,
  ...
}

CommonTransportChannelDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CriticalityDiagnostics  CRITICALITY  ignore      TYPE      CriticalityDiagnostics  PRESENCE  optional },
  ...
}

CommonTransportChannelDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- BLOCK RESOURCE REQUEST
--
-- *****

BlockResourceRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{BlockResourceRequest-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{BlockResourceRequest-Extensions}}      OPTIONAL,
  ...
}

BlockResourceRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-C-ID                CRITICALITY reject      TYPE      C-ID                PRESENCE  mandatory }|
  { ID      id-BlockingPriorityIndicator  CRITICALITY reject      TYPE      BlockingPriorityIndicator  PRESENCE  mandatory }|
  { ID      id-ShutdownTimer            CRITICALITY reject      TYPE      ShutdownTimer            PRESENCE  conditional },

```

```

-- The IE shall be present if the Blocking Priority IndicatorIE indicates "Normal Priority"--
...
}

BlockResourceRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- BLOCK RESOURCE RESPONSE
--
-- *****

BlockResourceResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{BlockResourceResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{BlockResourceResponse-Extensions}}    OPTIONAL,
    ...
}

BlockResourceResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics          CRITICALITY      ignore      TYPE      CriticalityDiagnostics      PRESENCE optional},
    ...
}

BlockResourceResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- BLOCK RESOURCE FAILURE
--
-- *****

BlockResourceFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{BlockResourceFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{BlockResourceFailure-Extensions}}    OPTIONAL,
    ...
}

BlockResourceFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-Cause                          CRITICALITY      ignore      TYPE      Cause                          PRESENCE mandatory }|
    { ID      id-CriticalityDiagnostics          CRITICALITY      ignore      TYPE      CriticalityDiagnostics          PRESENCE optional },
    ...
}

BlockResourceFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--

```

```

-- UNBLOCK RESOURCE INDICATION
--
-- *****

UnblockResourceIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{UnblockResourceIndication-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{UnblockResourceIndication-Extensions}} OPTIONAL,
    ...
}

UnblockResourceIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY  ignore      TYPE      C-ID          PRESENCE  mandatory},
    ...
}

UnblockResourceIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- AUDIT REQUIRED INDICATION
--
-- *****

AuditRequiredIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{AuditRequiredIndication-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{AuditRequiredIndication-Extensions}} OPTIONAL,
    ...
}

AuditRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
    ...
}

AuditRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- AUDIT REQUEST
--
-- *****

AuditRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{AuditRequest-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{AuditRequest-Extensions}} OPTIONAL,
    ...
}

AuditRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-Start-Of-Audit-Sequence-Indicator      CRITICALITY  reject  TYPE  Start-Of-Audit-Sequence-Indicator  PRESENCE  mandatory },

```



```

}
...
}
AuditRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
-- *****
--
-- AUDIT RESPONSE
--
-- *****

AuditResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{AuditResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{AuditResponse-Extensions}}    OPTIONAL,
    ...
}

AuditResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-End-Of-Audit-Sequence-Indicator      CRITICALITY   ignore   TYPE      End-Of-Audit-Sequence-Indicator      PRESENCE mandatory }|
    { ID      id-Cell-InformationList-AuditRsp        CRITICALITY   ignore   TYPE      Cell-InformationList-AuditRsp          PRESENCE
    optional   }|
    { ID      id-CCP-InformationList-AuditRsp         CRITICALITY   ignore   TYPE      CCP-InformationList-AuditRsp          PRESENCE optional
    }|
    -- CCP (Communication Control Port) --
    { ID      id-Local-Cell-InformationList-AuditRsp   CRITICALITY   ignore   TYPE      Local-Cell-InformationList-AuditRsp    PRESENCE
    optional   }|
    { ID      id-Local-Cell-Group-InformationList-AuditRsp CRITICALITY   ignore   TYPE      Local-Cell-Group-InformationList-AuditRsp PRESENCE
    optional   }|
    { ID      id-CriticalityDiagnostics                CRITICALITY   ignore   TYPE      CriticalityDiagnostics                PRESENCE optional
    },
    ...
}

AuditResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-AuditRsp}}

Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID      id-Cell-InformationItem-AuditRsp        CRITICALITY   ignore   TYPE      Cell-InformationItem-AuditRsp          PRESENCE   optional }
}

Cell-InformationItem-AuditRsp ::= SEQUENCE {
    c-ID                      C-ID,
    configurationGenerationID ConfigurationGenerationID,
    resourceOperationalState  ResourceOperationalState,
    availabilityStatus        AvailabilityStatus,
    local-Cell-ID             Local-Cell-ID,
    primary-SCH-Information   P-SCH-Information-AuditRsp    OPTIONAL,
    secondary-SCH-Information S-SCH-Information-AuditRsp             OPTIONAL,
}

```

```

primary-CPICH-Information          P-CPICH-Information-AuditRsp          OPTIONAL,
secondary-CPICH-InformationList    S-CPICH-InformationList-AuditRsp     OPTIONAL,
primary-CCPCH-Information          P-CCPCH-Information-AuditRsp        OPTIONAL,
bCH-Information                    BCH-Information-AuditRsp             OPTIONAL,
secondary-CCPCH-InformationList    S-CCPCH-InformationList-AuditRsp    OPTIONAL,
pCH-Information                    PCH-Information-AuditRsp            OPTIONAL,
pICH-Information                    PICH-Information-AuditRsp          OPTIONAL,
fACH-InformationList               FACH-InformationList-AuditRsp       OPTIONAL,
pRACH-InformationList              PRACH-InformationList-AuditRsp      OPTIONAL,
rACH-InformationList               RACH-InformationList-AuditRsp       OPTIONAL,
aICH-InformationList               AICH-InformationList-AuditRsp       OPTIONAL,
pCPCH-InformationList              PCPCH-InformationList-AuditRsp      OPTIONAL,
cPCH-InformationList               CPCH-InformationList-AuditRsp       OPTIONAL,
aP-AICH-InformationList            AP-AICH-InformationList-AuditRsp    OPTIONAL,
cDCA-ICH-InformationList           CDCA-ICH-InformationList-AuditRsp   OPTIONAL,
sCH-Information                    SCH-Information-AuditRsp            OPTIONAL,
iE-Extensions                      ProtocolExtensionContainer { { Cell-InformationItem-AuditRsp-ExtIEs } }  OPTIONAL,
...
}
Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
P-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-AuditRsp }}
P-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-SCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}
S-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-AuditRsp }}
S-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-SCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}
P-CPICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-AuditRsp }}
P-CPICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CPICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}
S-CPICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-AuditRsp }}
S-CPICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-CPICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}
P-CCPCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-AuditRsp }}
P-CCPCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

```

```

BCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ BCH-InformationIE-AuditRsp }}

BCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-BCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

S-CCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-AuditRsp }}

S-CCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

PCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PCH-InformationIE-AuditRsp }}

PCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PICH-InformationIE-AuditRsp }}

PICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

FACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-AuditRsp }}

FACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PRACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-AuditRsp }}

PRACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

RACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-AuditRsp }}

RACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-AuditRsp }}

AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

PCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-AuditRsp }}

PCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE optional }
}

```

CPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-AuditRsp }}

CPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
 { ID id-CPCH-Information CRITICALITY ignore TYPE Common-TransportChannel-Status-Information PRESENCE optional }
 }

AP-AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-AuditRsp }}

AP-AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
 { ID id-AP-AICH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
 }

CDCA-ICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-AuditRsp }}

CDCA-ICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
 { ID id-CDCA-ICH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
 }

SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ SCH-InformationIE-AuditRsp }}

SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
 { ID id-SCH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
 }

CCP-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-AuditRsp }}

CCP-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
 { ID id-CCP-InformationItem-AuditRsp CRITICALITY ignore TYPE CCP-InformationItem-AuditRsp PRESENCE mandatory }
 }

CCP-InformationItem-AuditRsp ::= SEQUENCE {
 communicationControlPortID CommunicationControlPortID,
 resourceOperationalState ResourceOperationalState,
 availabilityStatus AvailabilityStatus,
 iE-Extensions ProtocolExtensionContainer {{ CCP-InformationItem-AuditRsp-ExtIEs }} OPTIONAL,
 ...
 }

CCP-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 ...
 }

Local-Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-AuditRsp }}

Local-Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
 { ID id-Local-Cell-InformationItem-AuditRsp CRITICALITY ignore TYPE Local-Cell-InformationItem-AuditRsp PRESENCE mandatory }
 }

Local-Cell-InformationItem-AuditRsp ::= SEQUENCE {
 local-Cell-ID Local-Cell-ID,
 ...
 }

```

dl-or-global-capacityCredit      DL-or-Global-CapacityCredit,
ul-capacityCredit                 UL-CapacityCredit           OPTIONAL,
commonChannelsCapacityConsumptionLaw  CommonChannelsCapacityConsumptionLaw,
dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw,
maximumDL-PowerCapability           MaximumDL-PowerCapability   OPTIONAL,
minSpreadingFactor                 MinSpreadingFactor         OPTIONAL,
minimumDL-PowerCapability           MinimumDL-PowerCapability   OPTIONAL,
local-Cell-Group-ID                Local-Cell-ID              OPTIONAL,
iE-Extensions                       ProtocolExtensionContainer  {{ Local-Cell-InformationItem-AuditRsp-ExtIEs}}  OPTIONAL,
...
}

Local-Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-InformationItemIE-AuditRsp }}

Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID      id-Local-Cell-Group-InformationItem-AuditRsp          CRITICALITY      ignore          TYPE      Local-Cell-Group-InformationItem-AuditRsp
    PRESENCE      mandatory}
}

Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
    local-Cell-Group-ID                Local-Cell-ID,
    dl-or-global-capacityCredit         DL-or-Global-CapacityCredit,
    ul-capacityCredit                   UL-CapacityCredit           OPTIONAL,
    commonChannelsCapacityConsumptionLaw  CommonChannelsCapacityConsumptionLaw,
    dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw,
    iE-Extensions                       ProtocolExtensionContainer  {{ Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}  OPTIONAL,
    ...
}

Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- AUDIT FAILURE
--
-- *****

AuditFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{AuditFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{AuditFailure-Extensions}}  OPTIONAL,
    ...
}

AuditFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-Cause          CRITICALITY      ignore          TYPE      Cause          PRESENCE mandatory }|
    { ID      id-CriticalityDiagnostics  CRITICALITY      ignore          TYPE      CriticalityDiagnostics  PRESENCE optional },

```

```

}
...
}
AuditFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
-- *****
--
-- COMMON MEASUREMENT INITIATION REQUEST
--
-- *****

CommonMeasurementInitiationRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container   {{CommonMeasurementInitiationRequest-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{CommonMeasurementInitiationRequest-Extensions}} OPTIONAL,
  ...
}

CommonMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-MeasurementID          CRITICALITY reject          TYPE MeasurementID          PRESENCE mandatory
  } |
  { ID id-CommonMeasurementObjectType-CM-Rqst          CRITICALITY reject          TYPE CommonMeasurementObjectType-CM-Rqst          PRESENCE
  mandatory } |
  -- This IE represents both the Common Measurement Object Type IE and the choice based on the Common Measurement Object Type
  -- as described in the tabular message format in subclause 9.1.
  { ID id-CommonMeasurementType          CRITICALITY reject          TYPE CommonMeasurementType          PRESENCE mandatory
  } |
  { ID id-MeasurementFilterCoefficient          CRITICALITY reject          TYPE MeasurementFilterCoefficient          PRESENCE
  optional } |
  { ID id-ReportCharacteristics          CRITICALITY reject          TYPE ReportCharacteristics          PRESENCE mandatory
  } |
  { ID id-SFNReportingIndicator          CRITICALITY reject          TYPE FNReportingIndicator          PRESENCE mandatory
  } |
  { ID id-SFN          CRITICALITY reject          TYPE SFN          PRESENCE optional
  },
  ...
}

CommonMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CommonMeasurementObjectType-CM-Rqst ::= CHOICE {
  cell          Cell-CM-Rqst,
  rACH          RACH-CM-Rqst,
  cPCH          CPCH-CM-Rqst,
  ...
}

Cell-CM-Rqst ::= SEQUENCE {
  c-ID          C-ID,
  timeSlot          TimeSlot OPTIONAL,

```

```

    iE-Extensions          ProtocolExtensionContainer { { CellItem-CM-Rqst-ExtIEs } } OPTIONAL,
    ...
}

CellItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RACH-CM-Rqst ::= SEQUENCE {
    c-ID                    C-ID,
    commonTransportChannelID CommonTransportChannelID,
    iE-Extensions          ProtocolExtensionContainer { { RACHItem-CM-Rqst-ExtIEs } } OPTIONAL,
    ...
}

RACHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCH-CM-Rqst ::= SEQUENCE {
    c-ID                    C-ID,
    commonTransportChannelID CommonTransportChannelID,
    spreadingfactor         MinUL-ChannelisationCodeLength OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { CPCHItem-CM-Rqst-ExtIEs } } OPTIONAL,
    ...
}

CPCHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT INITIATION RESPONSE
--
-- *****

CommonMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container { {CommonMeasurementInitiationResponse-IEs} },
    protocolExtensions   ProtocolExtensionContainer { {CommonMeasurementInitiationResponse-Extensions} } OPTIONAL,
    ...
}

CommonMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-MeasurementID          CRITICALITY ignore          TYPE      MeasurementID          PRESENCE mandatory }|
    { ID      id-CommonMeasurementObjectType-CM-Rsp CRITICALITY ignore          TYPE      CommonMeasurementObjectType-CM-Rsp PRESENCE optional }|
    }|
    { ID      id-SFN                    CRITICALITY ignore          TYPE      SFN                    PRESENCE optional }|
    { ID      id-CriticalityDiagnostics CRITICALITY ignore          TYPE      CriticalityDiagnostics PRESENCE optional },
    ...
}

CommonMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
CommonMeasurementObjectType-CM-Rsp ::= CHOICE {
    cell                Cell-CM-Rsp,
    rACH                RACH-CM-Rsp,
    cPCH                CPCH-CM-Rsp,
    ...
}
Cell-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue CommonMeasurementValue,
    iE-Extensions          ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs} } OPTIONAL,
    ...
}
CellItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
RACH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue CommonMeasurementValue,
    iE-Extensions          ProtocolExtensionContainer { { RACHItem-CM-Rsp-ExtIEs} } OPTIONAL,
    ...
}
RACHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
CPCH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue CommonMeasurementValue,
    iE-Extensions          ProtocolExtensionContainer { { CPCHItem-CM-Rsp-ExtIEs} } OPTIONAL,
    ...
}
CPCHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
}
-- *****
--
-- COMMON MEASUREMENT INITIATION FAILURE
--
-- *****
CommonMeasurementInitiationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container {{CommonMeasurementInitiationFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonMeasurementInitiationFailure-Extensions}} OPTIONAL,
    ...
}
CommonMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {

```



```

{ ID      id-MeasurementID          CRITICALITY ignore      TYPE      MeasurementID          PRESENCE mandatory }|
{ ID      id-Cause                  CRITICALITY ignore      TYPE      Cause                  PRESENCE mandatory }|
{ ID      id-CriticalityDiagnostics CRITICALITY ignore      TYPE      CriticalityDiagnostics PRESENCE optional },
...
}

CommonMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- COMMON MEASUREMENT REPORT
--
-- *****

CommonMeasurementReport ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonMeasurementReport-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonMeasurementReport-Extensions}} OPTIONAL,
    ...
}

CommonMeasurementReport-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-MeasurementID          CRITICALITY ignore      TYPE      MeasurementID          PRESENCE mandatory }|
    { ID      id-CommonMeasurementObjectType-CM-Rprt CRITICALITY ignore      TYPE      CommonMeasurementObjectType-CM-Rprt PRESENCE mandatory }|
    }|
    { ID      id-SFN                    CRITICALITY ignore      TYPE      SFN                    PRESENCE optional },
    ...
}

CommonMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

CommonMeasurementObjectType-CM-Rprt ::= CHOICE {
    cell                Cell-CM-Rprt,
    rACH                 RACH-CM-Rprt,
    cPCH                 CPCH-CM-Rprt,
    ...
}

Cell-CM-Rprt ::= SEQUENCE {
    commonMeasurementValueInformation CommonMeasurementValueInformation,
    iE-Extensions           ProtocolExtensionContainer {{ CellItem-CM-Rprt-ExtIEs }} OPTIONAL,
    ...
}

CellItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

RACH-CM-Rprt ::= SEQUENCE {
    commonMeasurementValueInformation    CommonMeasurementValueInformation,
    IE-Extensions                        ProtocolExtensionContainer {{ RACHItem-CM-Rprt-ExtIEs }}    OPTIONAL,
    ...
}

RACHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCH-CM-Rprt ::= SEQUENCE {
    commonMeasurementValueInformation    CommonMeasurementValueInformation,
    IE-Extensions                        ProtocolExtensionContainer {{ CPCHItem-CM-Rprt-ExtIEs }}    OPTIONAL,
    ...
}

CPCHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT TERMINATION REQUEST
--
-- *****

CommonMeasurementTerminationRequest ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{CommonMeasurementTerminationRequest-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{CommonMeasurementTerminationRequest-Extensions}}    OPTIONAL,
    ...
}

CommonMeasurementTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-MeasurementID          CRITICALITY    ignore                TYPE    MeasurementID          PRESENCE mandatory},
    ...
}

CommonMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT FAILURE INDICATION
--
-- *****

CommonMeasurementFailureIndication ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{CommonMeasurementFailureIndication-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{CommonMeasurementFailureIndication-Extensions}}    OPTIONAL,
    ...
}

```

```

CommonMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-MeasurementID          CRITICALITY ignore      TYPE MeasurementID      PRESENCE mandatory }|
  { ID id-Cause                  CRITICALITY ignore      TYPE Cause              PRESENCE mandatory }|
  ...
}

CommonMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- CELL SETUP REQUEST FDD
--
-- *****

CellSetupRequestFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{CellSetupRequestFDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{CellSetupRequestFDD-Extensions}}  OPTIONAL,
  ...
}

CellSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-ID          CRITICALITY reject      TYPE Local-Cell-ID
  PRESENCE mandatory }|
  { ID id-C-ID                  CRITICALITY reject      TYPE C-ID
  mandatory }| PRESENCE
  { ID id-ConfigurationGenerationID CRITICALITY reject      TYPE ConfigurationGenerationID
  PRESENCE mandatory }|
  { ID id-T-Cell                CRITICALITY reject      TYPE T-Cell
  PRESENCE mandatory }|
  { ID id-UARFCNforNu           CRITICALITY reject      TYPE UARFCN
  PRESENCE mandatory }|
  { ID id-UARFCNforNd           CRITICALITY reject      TYPE UARFCN
  PRESENCE mandatory }|
  { ID id-MaximumTransmissionPower CRITICALITY reject      TYPE MaximumTransmissionPower
  PRESENCE mandatory }|
  { ID id-Closed-Loop-Timing-Adjustment-Mode CRITICALITY reject      TYPE Closedlooptimingadjustmentmode
  PRESENCE optional }|
  { ID id-PrimaryScramblingCode CRITICALITY reject      TYPE PrimaryScramblingCode
  PRESENCE mandatory }|
  { ID id-Synchronisation-Configuration-Cell-SetupRqst CRITICALITY reject      TYPE Synchronisation-Configuration-Cell-SetupRqst
  PRESENCE mandatory }|
  { ID id-DL-TPC-Pattern01Count CRITICALITY reject      TYPE DL-TPC-Pattern01Count
  PRESENCE mandatory }|
  { ID id-PrimarySCH-Information-Cell-SetupRqstFDD CRITICALITY reject      TYPE PrimarySCH-Information-Cell-SetupRqstFDD
  PRESENCE mandatory }|
  { ID id-SecondarySCH-Information-Cell-SetupRqstFDD CRITICALITY reject      TYPE SecondarySCH-Information-Cell-SetupRqstFDD
  PRESENCE mandatory }|
  { ID id-PrimaryCPICH-Information-Cell-SetupRqstFDD CRITICALITY reject      TYPE PrimaryCPICH-Information-Cell-SetupRqstFDD
  PRESENCE mandatory }|
  { ID id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD CRITICALITY reject      TYPE SecondaryCPICH-InformationList-Cell-
  SetupRqstFDD PRESENCE optional }|
}

```

```

    { ID id-PrimaryCCPCH-Information-Cell-SetupRqstFDD CRITICALITY reject TYPE PrimaryCCPCH-Information-Cell-SetupRqstFDD
      PRESENCE mandatory }|
    { ID id-Limited-power-increase-information-Cell-SetupRqstFDD CRITICALITY reject TYPE Limited-power-increase-information-Cell-
SetupRqstFDD PRESENCE mandatory },
    ...
}

CellSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Synchronisation-Configuration-Cell-SetupRqst ::= SEQUENCE {
    n-INSYNC-IND N-INSYNC-IND,
    n-OUTSYNC-IND N-OUTSYNC-IND,
    t-RLFFAILURE T-RLFFAILURE,
    iE-Extensions ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-SetupRqst-ExtIEs} } OPTIONAL,
    ...
}

Synchronisation-Configuration-Cell-SetupRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PrimarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    primarySCH-Power DL-Power,
    tSTD-Indicator TSTD-Indicator,
    iE-Extensions ProtocolExtensionContainer { { PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SecondarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    secondarySCH-Power DL-Power,
    tSTD-Indicator TSTD-Indicator,
    iE-Extensions ProtocolExtensionContainer { { SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PrimaryCPICH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    primaryCPICH-Power PrimaryCPICH-Power,
    transmitDiversityIndicator TransmitDiversityIndicator,
    iE-Extensions ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

}

PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SecondaryCPICH-InformationList-Cell-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container{{ SecondaryCPICH-
InformationItemIE-Cell-SetupRqstFDD }}

SecondaryCPICH-InformationItemIE-Cell-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD      CRITICALITY      reject      TYPE      SecondaryCPICH-InformationItem-Cell-
SetupRqstFDD      PRESENCE      mandatory}
}

SecondaryCPICH-InformationItem-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    dl-ScramblingCode            DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber      FDD-DL-ChannelisationCodeNumber,
    secondaryCPICH-Power         DL-Power,
    transmitDiversityIndicator   TransmitDiversityIndicator,
    iE-Extensions                ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs} }      OPTIONAL,
    ...
}

SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PrimaryCCPCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    bch-information              BCH-Information-Cell-SetupRqstFDD,
    sTTD-Indicator               STTD-Indicator,
    iE-Extensions                ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs} }      OPTIONAL,
    ...
}

PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

BCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID     CommonTransportChannelID,
    bch-Power                    DL-Power,
    iE-Extensions                ProtocolExtensionContainer { { BCH-Information-Cell-SetupRqstFDD-ExtIEs} }      OPTIONAL,
    ...
}

BCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Limited-power-increase-information-Cell-SetupRqstFDD ::= SEQUENCE {
    powerRaiseLimit              PowerRaiseLimit,

```

```

    dLPowerAveragingWindowSize      DLPowerAveragingWindowSize,
    iE-Extensions                    ProtocolExtensionContainer { { Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs } }
    OPTIONAL,
    ...
}

```

```

Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- CELL SETUP REQUEST TDD
--
-- *****

```

```

CellSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSetupRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CellSetupRequestTDD-Extensions}}    OPTIONAL,
    ...
}

```

```

CellSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-Local-Cell-ID          CRITICALITY  reject      TYPE  Local-Cell-ID          PRESENCE
    mandatory }|
    { ID      id-C-ID                   CRITICALITY  reject      TYPE  C-ID                   PRESENCE
    mandatory }|
    { ID      id-ConfigurationGenerationID  CRITICALITY  reject      TYPE  ConfigurationGenerationID  PRESENCE
    mandatory }|
    { ID      id-UARFCNforNt             CRITICALITY  reject      TYPE  UARFCN                   PRESENCE
    mandatory }|
    { ID      id-CellParameterID         CRITICALITY  reject      TYPE  CellParameterID          PRESENCE
    mandatory }|
    { ID      id-MaximumTransmissionPower  CRITICALITY  reject      TYPE  MaximumTransmissionPower  PRESENCE
    mandatory }|
    { ID      id-TransmissionDiversityApplied  CRITICALITY  reject      TYPE  TransmissionDiversityApplied  PRESENCE
    mandatory }|
    { ID      id-SyncCase                 CRITICALITY  reject      TYPE  SyncCase                  PRESENCE
    mandatory }|
    { ID      id-Synchronisation-Configuration-Cell-SetupRqst  CRITICALITY  reject      TYPE  Synchronisation-Configuration-Cell-SetupRqst
    PRESENCE mandatory }|
    { ID      id-DPCHConstant             CRITICALITY  reject      TYPE  ConstantValue            PRESENCE
    mandatory }|
    { ID      id-PUSCHConstant            CRITICALITY  reject      TYPE  ConstantValue            PRESENCE
    mandatory }|
    { ID      id-PRACHConstant            CRITICALITY  reject      TYPE  ConstantValue            PRESENCE
    mandatory }|
    { ID      id-TimingAdvanceApplied     CRITICALITY  reject      TYPE  TimingAdvanceApplied     PRESENCE
    mandatory }|
    { ID      id-SCH-Information-Cell-SetupRqstTDD  CRITICALITY  reject      TYPE  SCH-Information-Cell-SetupRqstTDD
    PRESENCE mandatory }|
    { ID      id-PCCPCH-Information-Cell-SetupRqstTDD  CRITICALITY  reject      TYPE  PCCPCH-Information-Cell-SetupRqstTDD
    PRESENCE mandatory }|
}

```

```

    { ID id-TimeSlotConfigurationList-Cell-SetupRqstTDD CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-SetupRqstTDD
      PRESENCE mandatory },
    ...
  }

CellSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  syncCaseIndicator SyncCaseIndicator-Cell-SetupRqstTDD-PSCH,
  sCH-Power DL-Power,
  tSTD-Indicator TSTD-Indicator,
  iE-Extensions ProtocolExtensionContainer { { SCH-Information-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

SCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SyncCaseIndicator-Cell-SetupRqstTDD-PSCH ::= ProtocolIE-Single-Container {{ SyncCaseIndicatorIE-Cell-SetupRqstTDD-PSCH }}

SyncCaseIndicatorIE-Cell-SetupRqstTDD-PSCH NBAP-PROTOCOL-IES ::= {
  { ID id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH CRITICALITY reject TYPE SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH PRESENCE
    mandatory }
}

SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH ::= CHOICE {
  case1 Case1-Cell-SetupRqstTDD,
  case2 Case2-Cell-SetupRqstTDD,
  ...
}

Case1-Cell-SetupRqstTDD ::= SEQUENCE {
  timeSlot TimeSlot,
  iE-Extensions ProtocolExtensionContainer { { Case1Item-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

Case1Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Case2-Cell-SetupRqstTDD ::= SEQUENCE {
  sCH-TimeSlot SCH-TimeSlot,
  iE-Extensions ProtocolExtensionContainer { { Case2Item-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

Case2Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}

PCCPCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    tdd-PhysicalChannelOffset        TDD-PhysicalChannelOffset,
    repetitionPeriod                  RepetitionPeriod,
    repetitionLength                  RepetitionLength,
    pCCPCH-Power                      PCCPCH-Power,
    sCTD-Indicator                    SCTD-Indicator,
    iE-Extensions                     ProtocolExtensionContainer { { PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-SetupRqstTDD

TimeSlotConfigurationItem-Cell-SetupRqstTDD ::= SEQUENCE {
    timeSlot                          TimeSlot,
    timeSlotStatus                     TimeSlotStatus,
    timeSlotDirection                  TimeSlotDirection,
    iE-Extensions                      ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SETUP RESPONSE
--
-- *****

CellSetupResponse ::= SEQUENCE {
    protocolIEs                        ProtocolIE-Container {{CellSetupResponse-IEs}},
    protocolExtensions                  ProtocolExtensionContainer {{CellSetupResponse-Extensions}} OPTIONAL,
    ...
}

CellSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics    CRITICALITY    ignore          TYPE      CriticalityDiagnostics    PRESENCE optional},
    ...
}

CellSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```
-- *****
--
-- CELL SETUP FAILURE
--
-- *****
```

```
CellSetupFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSetupFailure-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CellSetupFailure-Extensions}}    OPTIONAL,
    ...
}
```

```
CellSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-Cause          CRITICALITY ignore      TYPE Cause          PRESENCE mandatory }|
    { ID id-CriticalityDiagnostics CRITICALITY ignore      TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}
```

```
CellSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
-- *****
--
-- CELL RECONFIGURATION REQUEST FDD
--
-- *****
```

```
CellReconfigurationRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellReconfigurationRequestFDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CellReconfigurationRequestFDD-Extensions}}    OPTIONAL,
    ...
}
```

```
CellReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY reject      TYPE C-ID          PRESENCE
    mandatory }|
    { ID id-ConfigurationGenerationID CRITICALITY reject      TYPE ConfigurationGenerationID
    PRESENCE mandatory }|
    { ID id-MaximumTransmissionPower CRITICALITY reject      TYPE MaximumTransmissionPower
    PRESENCE optional }|
    { ID id-Synchronisation-Configuration-Cell-ReconfRqst CRITICALITY reject      TYPE Synchronisation-Configuration-Cell-ReconfRqst
    PRESENCE optional }|
    { ID id-PrimarySCH-Information-Cell-ReconfRqstFDD CRITICALITY reject      TYPE PrimarySCH-Information-Cell-ReconfRqstFDD
    PRESENCE optional }|
    { ID id-SecondarySCH-Information-Cell-ReconfRqstFDD CRITICALITY reject      TYPE SecondarySCH-Information-Cell-ReconfRqstFDD
    PRESENCE optional }|
    { ID id-PrimaryCPICH-Information-Cell-ReconfRqstFDD CRITICALITY reject      TYPE PrimaryCPICH-Information-Cell-ReconfRqstFDD
    PRESENCE optional }|
    { ID id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD CRITICALITY reject      TYPE SecondaryCPICH-InformationList-Cell-
    ReconfRqstFDD PRESENCE optional }|
}
```

```

    { ID      id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD
      PRESENCE optional },
    ...
}

CellReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Synchronisation-Configuration-Cell-ReconfRqst ::= SEQUENCE {
    n-INSYNC-IND          N-INSYNC-IND,
    n-OUTSYNC-IND         N-OUTSYNC-IND,
    t-RLFFAILURE          T-RLFFAILURE,
    iE-Extensions         ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PrimarySCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    primarySCH-Power         DL-Power,
    iE-Extensions            ProtocolExtensionContainer { { PrimarySCH-Information-Cell-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PrimarySCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SecondarySCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    secondarySCH-Power      DL-Power,
    iE-Extensions           ProtocolExtensionContainer { { SecondarySCH-Information-Cell-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

SecondarySCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PrimaryCPICH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    primaryCPICH-Power      PrimaryCPICH-Power,
    iE-Extensions           ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
SecondaryCPICH-InformationList-Cell-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container{{ SecondaryCPICH-InformationItemIE-Cell-ReconfRqstFDD }}
```

```
SecondaryCPICH-InformationItemIE-Cell-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD CRITICALITY reject TYPE SecondaryCPICH-InformationItem-Cell-
  ReconfRqstFDD PRESENCE mandatory}
}
```

```
SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  secondaryCPICH-Power DL-Power,
  iE-Extensions ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD-ExtIEs} }
  OPTIONAL,
  ...
}
```

```
SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
PrimaryCCPCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
  bCH-information BCH-information-Cell-ReconfRqstFDD,
  iE-Extensions ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs} } OPTIONAL,
  ...
}
```

```
PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
BCH-information-Cell-ReconfRqstFDD ::= SEQUENCE {
  commonTransportChannelID CommonTransportChannelID,
  bCH-Power DL-Power,
  iE-Extensions ProtocolExtensionContainer { { BCH-information-Cell-ReconfRqstFDD-ExtIEs} } OPTIONAL,
  ...
}
```

```
BCH-information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
-- *****
--
-- CELL RECONFIGURATION REQUEST TDD
--
-- *****
```

```
CellReconfigurationRequestTDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{CellReconfigurationRequestTDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{CellReconfigurationRequestTDD-Extensions}} OPTIONAL,
  ...
}
```

```

CellReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-C-ID CRITICALITY reject TYPE C-ID PRESENCE
    mandatory }|
  { ID id-ConfigurationGenerationID CRITICALITY reject TYPE ConfigurationGenerationID PRESENCE
    mandatory }|
  { ID id-Synchronisation-Configuration-Cell-ReconfRqst CRITICALITY reject TYPE Synchronisation-Configuration-Cell-ReconfRqst
    PRESENCE optional }|
  { ID id-TimingAdvanceApplied CRITICALITY reject TYPE TimingAdvanceApplied PRESENCE
    optional }|
  { ID id-SCH-Information-Cell-ReconfRqstTDD CRITICALITY reject TYPE SCH-Information-Cell-ReconfRqstTDD
    PRESENCE optional }|
  { ID id-PCCPCH-Information-Cell-ReconfRqstTDD CRITICALITY reject TYPE PCCPCH-Information-Cell-ReconfRqstTDD
    PRESENCE optional }|
  { ID id-MaximumTransmissionPower CRITICALITY reject TYPE MaximumTransmissionPower PRESENCE
    optional }|
  { ID id-DPCHConstant CRITICALITY reject TYPE ConstantValue PRESENCE
    optional }|
  { ID id-PUSCHConstant CRITICALITY reject TYPE ConstantValue PRESENCE
    optional }|
  { ID id-PRACHConstant CRITICALITY reject TYPE ConstantValue PRESENCE
    optional }|
  { ID id-TimeSlotConfigurationList-Cell-ReconfRqstTDD CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-ReconfRqstTDD
    PRESENCE mandatory },
  ...
}

CellReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  sCH-Power DL-Power,
  iE-Extensions ProtocolExtensionContainer { { PSCH-Information-Cell-ReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

PSCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PCCPCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  pCCPCH-Power DL-Power,
  iE-Extensions ProtocolExtensionContainer { { PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

TimeSlotConfigurationList-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-ReconfRqstTDD

TimeSlotConfigurationItem-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlot                TimeSlot,
    timeSlotStatus          TimeSlotStatus,
    timeSlotDirection       TimeSlotDirection,
    iE-Extensions           ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL RECONFIGURATION RESPONSE
--
-- *****

CellReconfigurationResponse ::= SEQUENCE {
    protocolIEs             ProtocolIE-Container {{CellReconfigurationResponse-IEs}},
    protocolExtensions      ProtocolExtensionContainer {{CellReconfigurationResponse-Extensions}} OPTIONAL,
    ...
}

CellReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CriticalityDiagnostics    CRITICALITY    ignore          TYPE    CriticalityDiagnostics    PRESENCE optional},
    ...
}

CellReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL RECONFIGURATION FAILURE
--
-- *****

CellReconfigurationFailure ::= SEQUENCE {
    protocolIEs             ProtocolIE-Container {{CellReconfigurationFailure-IEs}},
    protocolExtensions      ProtocolExtensionContainer {{CellReconfigurationFailure-Extensions}} OPTIONAL,
    ...
}

CellReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-Cause                CRITICALITY    ignore          TYPE    Cause                PRESENCE    mandatory }|
    { ID    id-CriticalityDiagnostics    CRITICALITY    ignore          TYPE    CriticalityDiagnostics    PRESENCE optional },
    ...
}

```

```

CellReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL DELETION REQUEST
--
-- *****

CellDeletionRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellDeletionRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellDeletionRequest-Extensions}}    OPTIONAL,
    ...
}

CellDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY    reject          TYPE      C-ID          PRESENCE    mandatory},
    ...
}

CellDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL DELETION RESPONSE
--
-- *****

CellDeletionResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellDeletionResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellDeletionResponse-Extensions}}    OPTIONAL,
    ...
}

CellDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics          CRITICALITY    ignore          TYPE      CriticalityDiagnostics          PRESENCE optional},
    ...
}

CellDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RESOURCE STATUS INDICATION
--
-- *****

ResourceStatusIndication ::= SEQUENCE {

```

```

    protocolIEs          ProtocolIE-Container    {{ResourceStatusIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{ResourceStatusIndication-Extensions}} OPTIONAL,
    ...
}

ResourceStatusIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-IndicationType-ResourceStatusInd      CRITICALITY   ignore          TYPE      IndicationType-ResourceStatusInd      PRESENCE
      mandatory } }
    -- This IE represents both the Indication Type IE and the choice based on the indication type as described in the tabular message format in
    subclause 9.1.1.
    { ID      id-Cause          CRITICALITY   ignore          TYPE      Cause          PRESENCE      optional
      } ,
    ...
}

ResourceStatusIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IndicationType-ResourceStatusInd ::= CHOICE {
    no-Failure          No-Failure-ResourceStatusInd,
    serviceImpacting   ServiceImpacting-ResourceStatusInd,
    ...
}

No-Failure-ResourceStatusInd ::= SEQUENCE {
    local-Cell-InformationList      Local-Cell-InformationList-ResourceStatusInd,
    local-Cell-Group-InformationList Local-Cell-Group-InformationList-ResourceStatusInd OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { No-FailureItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

No-FailureItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Local-Cell-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-
InformationItemIE-ResourceStatusInd }}

Local-Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-InformationItem-ResourceStatusInd PRESENCE
      mandatory } }
}

Local-Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
    local-CellID          Local-Cell-ID,
    addorDeleteIndicator AddorDeleteIndicator,
    dl-or-global-capacityCredit DL-or-Global-CapacityCredit OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    ul-capacityCredit     UL-CapacityCredit OPTIONAL,
    commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
}

```

```

-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
maximumDL-PowerCapability          MaximumDL-PowerCapability          OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
minSpreadingFactor                MinSpreadingFactor                OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
minimumDL-PowerCapability          MinimumDL-PowerCapability          OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
local-Cell-Group-ID               Local-Cell-ID                   OPTIONAL,
iE-Extensions                      ProtocolExtensionContainer { { Local-Cell-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
...
}

Local-Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-InformationItemIE-ResourceStatusInd }}

Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-Group-InformationItem-ResourceStatusInd    CRITICALITY ignore TYPE Local-Cell-Group-InformationItem-ResourceStatusInd
    PRESENCE mandatory }
}

Local-Cell-Group-InformationItem-ResourceStatusInd ::= SEQUENCE {
    local-Cell-Group-ID          Local-Cell-ID,
    dl-or-global-capacityCredit  DL-or-Global-CapacityCredit,
    ul-capacityCredit            UL-CapacityCredit          OPTIONAL,
    commonChannelsCapacityConsumptionLaw  CommonChannelsCapacityConsumptionLaw,
    dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw,
    iE-Extensions                ProtocolExtensionContainer { { Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ServiceImpacting-ResourceStatusInd ::= SEQUENCE {
    local-Cell-InformationList      Local-Cell-InformationList2-ResourceStatusInd    OPTIONAL,
    local-Cell-Group-InformationList  Local-Cell-Group-InformationList2-ResourceStatusInd  OPTIONAL,
    cCP-InformationList              CCP-InformationList-ResourceStatusInd            OPTIONAL,
    cell-InformationList              Cell-InformationList-ResourceStatusInd            OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { ServiceImpactingItem-ResourceStatusInd-ExtIEs } }    OPTIONAL,
    ...
}

ServiceImpactingItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Local-Cell-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE2-ResourceStatusInd }}

```



```
Local-Cell-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-InformationItem2-ResourceStatusInd  CRITICALITY ignore  TYPE Local-Cell-InformationItem2-ResourceStatusInd  PRESENCE
  mandatory }
}
```

```
Local-Cell-InformationItem2-ResourceStatusInd ::= SEQUENCE {
  local-Cell-ID                Local-Cell-ID,
  dl-or-global-capacityCredit  DL-or-Global-CapacityCredit  OPTIONAL,
  ul-capacityCredit            UL-CapacityCredit            OPTIONAL,
  commonChannelsCapacityConsumptionLaw  CommonChannelsCapacityConsumptionLaw  OPTIONAL,
  dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw  OPTIONAL,
  maximum-DL-PowerCapability  MaximumDL-PowerCapability  OPTIONAL,
  minSpreadingFactor          MinSpreadingFactor          OPTIONAL,
  minimumDL-PowerCapability  MinimumDL-PowerCapability  OPTIONAL,
  iE-Extensions                ProtocolExtensionContainer { { Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs } }  OPTIONAL,
  ...
}
```

```
Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-InformationItemIE2-ResourceStatusInd }}
```

```
Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-Group-InformationItem2-ResourceStatusInd  CRITICALITY ignore  TYPE Local-Cell-Group-InformationItem2-ResourceStatusInd
  PRESENCE mandatory }
}
```

```
Local-Cell-Group-InformationItem2-ResourceStatusInd ::= SEQUENCE {
  local-Cell-Group-ID                Local-Cell-ID,
  dl-or-global-capacityCredit  DL-or-Global-CapacityCredit  OPTIONAL,
  ul-capacityCredit            UL-CapacityCredit            OPTIONAL,
  commonChannelsCapacityConsumptionLaw  CommonChannelsCapacityConsumptionLaw  OPTIONAL,
  dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw  OPTIONAL,
  iE-Extensions                ProtocolExtensionContainer { { Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs } }  OPTIONAL,
  ...
}
```

```
Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
CCP-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-ResourceStatusInd }}
```

```
CCP-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-CCP-InformationItem-ResourceStatusInd  CRITICALITY ignore  TYPE CCP-InformationItem-ResourceStatusInd  PRESENCE mandatory }
}
```

```
CCP-InformationItem-ResourceStatusInd ::= SEQUENCE {
```

```

communicationControlPortID      CommunicationControlPortID,
resourceOperationalState        ResourceOperationalState,
availabilityStatus              AvailabilityStatus,
iE-Extensions                   ProtocolExtensionContainer { { CCP-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
...
}

CCP-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

Cell-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-ResourceStatusInd }}

Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Cell-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Cell-InformationItem-ResourceStatusInd PRESENCE mandatory }
}

Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
  c-ID                          C-ID,
  resourceOperationalState      ResourceOperationalState OPTIONAL,
  availabilityStatus            AvailabilityStatus OPTIONAL,
  primary-SCH-Information       P-SCH-Information-ResourceStatusInd OPTIONAL, --FDD only
  secondary-SCH-Information     S-SCH-Information-ResourceStatusInd OPTIONAL, --FDD only
  primary-CPICH-Information     P-CPICH-Information-ResourceStatusInd OPTIONAL, --FDD only
  secondary-CPICH-Information   S-CPICH-InformationList-ResourceStatusInd OPTIONAL, --FDD only
  primary-CCPCH-Information     P-CCPCH-Information-ResourceStatusInd OPTIONAL,
  BCH-Information              BCH-Information-ResourceStatusInd OPTIONAL,
  secondary-CCPCH-InformationList S-CCPCH-InformationList-ResourceStatusInd OPTIONAL,
  pCH-Information              PCH-Information-ResourceStatusInd OPTIONAL,
  pICH-Information             PICH-Information-ResourceStatusInd OPTIONAL,
  fACH-InformationList         FACH-InformationList-ResourceStatusInd OPTIONAL,
  pRACH-InformationList        PRACH-InformationList-ResourceStatusInd OPTIONAL,
  rACH-InformationList         RACH-InformationList-ResourceStatusInd OPTIONAL,
  aICH-InformationList         AICH-InformationList-ResourceStatusInd OPTIONAL, --FDD only
  pCPCH-InformationList        PCPCH-InformationList-ResourceStatusInd OPTIONAL, --FDD only
  cPCH-InformationList         CPCH-InformationList-ResourceStatusInd OPTIONAL, --FDD only
  aP-AICH-InformationList      AP-AICH-InformationList-ResourceStatusInd OPTIONAL, --FDD only
  cDCA-ICH-InformationList     CDCA-ICH-InformationList-ResourceStatusInd OPTIONAL, --FDD only
  sCH-Information              SCH-Information-ResourceStatusInd OPTIONAL, --TDD only
  iE-Extensions               ProtocolExtensionContainer { { Cell-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
  ...
}

Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

P-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-ResourceStatusInd }}

P-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-SCH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
}

```

```

S-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-ResourceStatusInd }}

S-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-SCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

P-CPICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-ResourceStatusInd }}

P-CPICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-CPICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

S-CPICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-ResourceStatusInd }}

S-CPICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-CPICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

P-CCPCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-ResourceStatusInd }}

P-CCPCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

BCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ BCH-InformationIE-ResourceStatusInd }}

BCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-BCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

S-CCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-ResourceStatusInd }}

S-CCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

PCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PCH-InformationIE-ResourceStatusInd }}

PCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PICH-InformationIE-ResourceStatusInd }}

PICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

FACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-ResourceStatusInd }}

```

```

FACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PRACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-ResourceStatusInd }}

PRACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

RACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-ResourceStatusInd }}

RACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-ResourceStatusInd }}

AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

PCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-ResourceStatusInd }}

PCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE optional }
}

CPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-ResourceStatusInd }}

CPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-CPCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE optional }
}

AP-AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-ResourceStatusInd }}

AP-AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-AP-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE optional }
}

CDCA-ICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-ResourceStatusInd }}

CDCA-ICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-CDCA-ICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE optional }
}

```

```

SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ SCH-InformationIE-ResourceStatusInd }}

SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-SCH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information    PRESENCE mandatory }
}

-- *****
--
-- SYSTEM INFORMATION UPDATE REQUEST
--
-- *****

SystemInformationUpdateRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{SystemInformationUpdateRequest-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{SystemInformationUpdateRequest-Extensions}}    OPTIONAL,
  ...
}

SystemInformationUpdateRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID    id-C-ID                CRITICALITY reject    TYPE    C-ID                PRESENCE mandatory
  }|
  { ID    id-BCCH-ModificationTime    CRITICALITY reject    TYPE    BCCH-ModificationTime    PRESENCE optional
  }|
  { ID    id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst    CRITICALITY reject    TYPE    MIB-SB-SIB-InformationList-SystemInfoUpdateRqst
  PRESENCE mandatory },
  ...
}

SystemInformationUpdateRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

MIB-SB-SIB-InformationList-SystemInfoUpdateRqst ::= SEQUENCE (SIZE (1..maxIB)) OF MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst

MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst ::= SEQUENCE {
  iB-Type                IB-Type,
  iB-OC-ID               IB-OC-ID,
  deletionIndicator      DeletionIndicator-SystemInfoUpdate,
  iE-Extensions          ProtocolExtensionContainer { { MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst-ExtIEs} }    OPTIONAL,
  ...
}

MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DeletionIndicator-SystemInfoUpdate ::= CHOICE {
  no-Deletion            No-Deletion-SystemInfoUpdate,
  yes-Deletion           NULL
}

```

```

No-Deletion-SystemInfoUpdate ::= SEQUENCE {
    sIB-Originator          SIB-Originator          OPTIONAL,
    -- This IE shall be present if the IB-Type IE is set to "SIB"
    iB-SG-REP              IB-SG-REP              OPTIONAL,
    segmentInformationList SegmentInformationList-SystemInfoUpdate,
    iE-Extensions         ProtocolExtensionContainer { { No-DeletionItem-SystemInfoUpdate-ExtIEs } } OPTIONAL,
    ...
}

No-DeletionItem-SystemInfoUpdate-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SegmentInformationList-SystemInfoUpdate ::= ProtocolIE-Single-Container {{ SegmentInformationListIEs-SystemInfoUpdate }}

SegmentInformationListIEs-SystemInfoUpdate NBAP-PROTOCOL-IES ::= {
    { ID id-SegmentInformationListIE-SystemInfoUpdate CRITICALITY reject TYPE SegmentInformationListIE-SystemInfoUpdate PRESENCE mandatory }
}

SegmentInformationListIE-SystemInfoUpdate ::= SEQUENCE (SIZE (1..maxIBSEG)) OF SegmentInformationItem-SystemInfoUpdate

SegmentInformationItem-SystemInfoUpdate ::= SEQUENCE {
    iB-SG-POS              IB-SG-POS              OPTIONAL,
    segment-Type          Segment-Type          OPTIONAL,
    -- This IE shall be present if the SIB Originator IE is set to "CRNC" or the IB-Type IE is set to "MIB", "SB1" or "SB2"
    iB-SG-DATA            IB-SG-DATA            OPTIONAL,
    -- This IE shall be present if the SIB Originator IE is set to "CRNC" or the IB-Type IE is set to "MIB", "SB1" or "SB2"
    iE-Extensions         ProtocolExtensionContainer { { SegmentInformationItem-SystemInfoUpdate-ExtIEs } } OPTIONAL,
    ...
}

SegmentInformationItem-SystemInfoUpdate-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- SYSTEM INFORMATION UPDATE RESPONSE
--
-- *****

SystemInformationUpdateResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container   {{SystemInformationUpdateResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{SystemInformationUpdateResponse-Extensions}} OPTIONAL,
    ...
}

SystemInformationUpdateResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional},
    ...
}

SystemInformationUpdateResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
-- *****
--
-- SYSTEM INFORMATION UPDATE FAILURE
--
-- *****

SystemInformationUpdateFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{SystemInformationUpdateFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{SystemInformationUpdateFailure-Extensions}}    OPTIONAL,
    ...
}

SystemInformationUpdateFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-Cause          CRITICALITY    ignore          TYPE    Cause          PRESENCE mandatory }|
    { ID    id-CriticalityDiagnostics    CRITICALITY    ignore          TYPE    CriticalityDiagnostics    PRESENCE optional },
    ...
}

SystemInformationUpdateFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK SETUP REQUEST FDD
--
-- *****

RadioLinkSetupRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupRequestFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupRequestFDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID    CRITICALITY    reject          TYPE    CRNC-CommunicationContextID    PRESENCE
    mandatory }|
    { ID    id-UL-DPCH-Information-RL-SetupRqstFDD    CRITICALITY    reject          TYPE    UL-DPCH-Information-RL-SetupRqstFDD    PRESENCE
    mandatory }|
    { ID    id-DL-DPCH-Information-RL-SetupRqstFDD    CRITICALITY    reject          TYPE    DL-DPCH-Information-RL-SetupRqstFDD    PRESENCE
    mandatory }|
    { ID    id-DCH-FDD-Information          CRITICALITY    reject          TYPE    DCH-FDD-Information          PRESENCE mandatory }|
    { ID    id-DSCH-FDD-Information          CRITICALITY    reject          TYPE    DSCH-FDD-Information          PRESENCE optional }|
    { ID    id-TFCI2-Bearer-Information-RL-SetupRqstFDD    CRITICALITY    ignore          TYPE    TFCI2-Bearer-Information-RL-SetupRqstFDD    PRESENCE
    optional }|
    { ID    id-RL-InformationList-RL-SetupRqstFDD    CRITICALITY    notify          TYPE    RL-InformationList-RL-SetupRqstFDD    PRESENCE
    mandatory }|
    { ID    id-Transmission-Gap-Pattern-Sequence-Information    CRITICALITY    reject          TYPE    Transmission-Gap-Pattern-Sequence-Information
    PRESENCE optional }|
}

```

```

{ ID id-Active-Pattern-Sequence-Information          CRITICALITY reject          TYPE Active-Pattern-Sequence-Information  PRESENCE
  optional },
  ...
}

RadioLinkSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
  ul-ScramblingCode                UL-ScramblingCode,
  minUL-ChannelisationCodeLength    MinUL-ChannelisationCodeLength,
  maxNrOfUL-DPDCHs                  MaxNrOfUL-DPDCHs          OPTIONAL,
  -- This IE shall be present if Min UL Channelisation Code length IE is set to 4 --
  ul-PunctureLimit                  PunctureLimit,
  tFCS                               TFCS,
  ul-DPCCH-SlotFormat                UL-DPCCH-SlotFormat,
  ul-SIR-Target                      UL-SIR,
  diversityMode                      DiversityMode,
  sSDT-CellID-Length                 SSDT-CellID-Length      OPTIONAL,
  s-FieldLength                      S-FieldLength          OPTIONAL,
  iE-Extensions                      ProtocolExtensionContainer { { UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
  tFCS                               TFCS,
  dl-DPCH-SlotFormat                DL-DPCH-SlotFormat,
  tFCI-SignallingMode                TFCI-SignallingMode,
  tFCI-Presence                      TFCI-Presence          OPTIONAL,
  -- this IE shall be present if the DL DPCH slot format IE is set to any of the values from 12 to 16 --
  multiplexingPosition                MultiplexingPosition,
  pDSCH-RL-ID                        RL-ID                  OPTIONAL,
  -- This IE shall be present if the DSCH Information IE is present --
  pDSCH-CodeMapping                  PDSCH-CodeMapping      OPTIONAL,
  -- This IE shall be present if the DSCH Information IE is present --
  powerOffsetInformation              PowerOffsetInformation-RL-SetupRqstFDD,
  fdd-TPC-DownlinkStepSize            FDD-TPC-DownlinkStepSize,
  limitedPowerIncrease                LimitedPowerIncrease,
  innerLoopDLPCStatus                 InnerLoopDLPCStatus,
  iE-Extensions                      ProtocolExtensionContainer { { DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PowerOffsetInformation-RL-SetupRqstFDD ::= SEQUENCE {

```



```

    pO1-ForTFCl-Bits      PowerOffset,
    pO2-ForTPC-Bits      PowerOffset,
    pO3-ForPilotBits     PowerOffset,
    iE-Extensions        ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCl2-Bearer-Information-RL-SetupRqstFDD ::= SEQUENCE {
    toAWS                ToAWS,
    toAWE                ToAWE,
    iE-Extensions        ProtocolExtensionContainer { { TFCl2-Bearer-Information-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

TFCl2-Bearer-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF
    ProtocolIE-Single-Container{{ RL-InformationItemIE-RL-SetupRqstFDD }}

RL-InformationItemIE-RL-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-RL-InformationItem-RL-SetupRqstFDD      CRITICALITY    notify          TYPE RL-InformationItem-RL-SetupRqstFDD      PRESENCE
      mandatory}
}

RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    c-ID                 C-ID,
    firstRLS-indicator   FirstRLS-Indicator,
    frameOffset          FrameOffset,
    chipOffset           ChipOffset,
    propagationDelay     PropagationDelay          OPTIONAL,
    diversityControlField DiversityControlField    OPTIONAL,
    -- This IE shall be present if the RL is not the first one in the RL Information IE
    dl-CodeInformation    FDD-DL-CodeInformation,
    initialDL-transmissionPower DL-Power,
    maximumDL-power      DL-Power,
    minimumDL-power      DL-Power,
    sSDT-Cell-Identity   SSdT-Cell-Identity          OPTIONAL,
    transmitDiversityIndicator TransmitDiversityIndicator    OPTIONAL,
    -- This IE shall be present if Diversity Mode IE in UL DPCH Information group is not set to "none"
    iE-Extensions        ProtocolExtensionContainer { { RL-InformationItem-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

RL-InformationItem-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- RADIO LINK SETUP REQUEST TDD
--
-- *****

RadioLinkSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}} OPTIONAL,
    ...
}

RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID          CRITICALITY reject          TYPE CRNC-CommunicationContextID
    PRESENCE  mandatory }|
    { ID      id-UL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify          TYPE UL-CCTrCH-InformationList-RL-SetupRqstTDD
    PRESENCE  optional }|
    { ID      id-DL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify          TYPE DL-CCTrCH-InformationList-RL-SetupRqstTDD
    PRESENCE  optional }|
    { ID      id-DCH-TDD-Information                  CRITICALITY reject          TYPE DCH-TDD-Information      PRESENCE optional }|
    { ID      id-DSCH-TDD-Information                  CRITICALITY reject          TYPE DSCH-TDD-Information     PRESENCE optional }|
    { ID      id-USCH-Information                      CRITICALITY reject          TYPE USCH-Information         PRESENCE optional }|
    { ID      id-RL-Information-RL-SetupRqstTDD        CRITICALITY reject          TYPE RL-Information-RL-SetupRqstTDD
    PRESENCE  mandatory },
    ...
}

RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
    ProtocolIE-Single-Container{{ UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify          TYPE UL-CCTrCH-InformationItem-RL-SetupRqstTDD
    PRESENCE  mandatory}
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS               TFCS,
    tFCI-Coding        TFCI-Coding,
    punctureLimit      PunctureLimit,
    uL-DPCH-Information UL-DPCH-Information-RL-SetupRqstTDD OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

UL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationList-RL-SetupRqstTDD      CRITICALITY notify   TYPE UL-DPCH-InformationItem-RL-SetupRqstTDD      PRESENCE mandatory }
}

UL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  uL-Timeslot-Information    UL-Timeslot-Information,
  iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container{{ DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID      id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD      CRITICALITY      notify      TYPE DL-CCTrCH-InformationItem-RL-SetupRqstTDD
  PRESENCE      mandatory}
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCtRCH-ID                CCTrCH-ID,
  tFCS                      TFCS,
  tFCI-Coding               TFCI-Coding,
  punctureLimit             PunctureLimit,
  tdd-TPC-DownlinkStepSize  TDD-TPC-DownlinkStepSize,
  cCtRCH-TPCList            CCTrCH-TPCList-RL-SetupRqstTDD      OPTIONAL,
  dL-DPCH-Information        DL-DPCH-Information-RL-SetupRqstTDD      OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD

CCTrCH-TPCItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCtRCH-ID                CCTrCH-ID,
  iE-Extensions              ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationList-RL-SetupRqstTDD      CRITICALITY notify  TYPE DL-DPCH-InformationItem-RL-SetupRqstTDD      PRESENCE mandatory  }
}

DL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  dL-Timeslot-Information  DL-Timeslot-Information,
  iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
  rL-ID                  RL-ID,
  c-ID                   C-ID,
  frameOffset            FrameOffset,
  specialBurstScheduling SpecialBurstScheduling,
  initialDL-transmissionPower  DL-Power,
  maximumDL-power        DL-Power,
  minimumDL-power        DL-Power,
  dL-TimeSlotISCPInfo    DL-TimeslotISCPInfo OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { { RL-Information-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK SETUP RESPONSE FDD
--
-- *****

RadioLinkSetupResponseFDD ::= SEQUENCE {
  protocolIEs           ProtocolIE-Container  {{RadioLinkSetupResponseFDD-IEs}},
  protocolExtensions    ProtocolExtensionContainer  {{RadioLinkSetupResponseFDD-Extensions}}  OPTIONAL,
  ...
}

RadioLinkSetupResponseFDD-IEs NBAP-PROTOCOL-IES ::= {

```

```

{ ID id-CRNC-CommunicationContextID CRITICALITY ignore TYPE CRNC-CommunicationContextID
  PRESENCE mandatory }|
{ ID id-NodeB-CommunicationContextID CRITICALITY ignore TYPE NodeB-CommunicationContextID PRESENCE
  mandatory }|
{ ID id-CommunicationControlPortID CRITICALITY ignore TYPE CommunicationControlPortID PRESENCE
  mandatory }|
{ ID id-RL-InformationResponseList-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseList-RL-SetupRspFDD
  PRESENCE mandatory }|
{ ID id-TFCI2-BearerInformationResponse CRITICALITY ignore TYPE TFCI2-BearerInformationResponse PRESENCE optional }|
{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE
  optional },
...
}

RadioLinkSetupResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container{{ RL-InformationResponseItemIE-RL-
SetupRspFDD }}

RL-InformationResponseItemIE-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponseItem-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseItem-RL-SetupRspFDD
    PRESENCE mandatory}
}

RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
  rL-ID RL-ID,
  rL-Set-ID RL-Set-ID,
  received-total-wide-band-power Received-total-wide-band-power-Value,
  diversityIndication DiversityIndication-RL-SetupRspFDD,
  This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
  the tabular message format in subclause 9.1.
  dSCH-InformationResponseList DSCH-InformationResponseList-RL-SetupRspFDD OPTIONAL,
  sSDT-SupportIndicator SSDT-SupportIndicator,
  iE-Extensions ProtocolExtensionContainer { { RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DiversityIndication-RL-SetupRspFDD ::= CHOICE {
  combining Combining-RL-SetupRspFDD,
  nonCombiningOrFirstRL NonCombiningOrFirstRL-RL-SetupRspFDD
}

Combining-RL-SetupRspFDD ::= SEQUENCE {
  rL-ID RL-ID,
  iE-Extensions ProtocolExtensionContainer { { Combining-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

Combining-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

NonCombiningOrFirstRL-RL-SetupRspFDD ::= SEQUENCE {
  dCH-InformationResponse          DCH-InformationResponse,
  iE-Extensions                    ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
  ...
}

NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DSCH-InformationResponseList-RL-SetupRspFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupRspFDD }}

DSCH-InformationResponseListIEs-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationResponse CRITICALITY ignore TYPE DSCH-InformationResponse PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK SETUP RESPONSE TDD
--
-- *****

RadioLinkSetupResponseTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkSetupResponseTDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupResponseTDD-Extensions}} OPTIONAL,
  ...
}

RadioLinkSetupResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID CRITICALITY ignore TYPE CRNC-CommunicationContextID PRESENCE mandatory }|
  { ID id-NodeB-CommunicationContextID CRITICALITY ignore TYPE NodeB-CommunicationContextID PRESENCE mandatory }|
  { ID id-CommunicationControlPortID CRITICALITY ignore TYPE CommunicationControlPortID PRESENCE mandatory }|
  { ID id-RL-InformationResponse-RL-SetupRspTDD CRITICALITY ignore TYPE RL-InformationResponse-RL-SetupRspTDD PRESENCE mandatory }|
  { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

RadioLinkSetupResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
  rL-ID RL-ID,

```

```

    uL-TimeSlot-ISCP-Info          UL-TimeSlot-ISCP-Info,
    ul-PhysCH-SF-Variation         UL-PhysCH-SF-Variation,
    dCH-InformationResponseList    DCH-InformationResponseList-RL-SetupRspTDD    OPTIONAL,
    dSCH-InformationResponseList    DSCH-InformationResponseList-RL-SetupRspTDD    OPTIONAL,
    uSCH-InformationResponseList    USCH-InformationResponseList-RL-SetupRspTDD    OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { RL-InformationResponseList-RL-SetupRspTDD-ExtIEs } }    OPTIONAL,
    ...
}

RL-InformationResponseList-RL-SetupRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container{{ DCH-InformationResponseListIEs-RL-SetupRspTDD }}

DCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE mandatory}
}

DSCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupRspTDD }}

DSCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationResponse CRITICALITY ignore TYPE DSCH-InformationResponse PRESENCE mandatory }
}

USCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-SetupRspTDD }}

USCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
    { ID id-USCH-InformationResponse CRITICALITY ignore TYPE USCH-InformationResponse PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK SETUP FAILURE FDD
--
-- *****

RadioLinkSetupFailureFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupFailureFDD-IEs}},
    protocolExtensions    ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkSetupFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID CRITICALITY ignore TYPE CRNC-CommunicationContextID PRESENCE mandatory }|
    { ID id-NodeB-CommunicationContextID CRITICALITY ignore TYPE NodeB-CommunicationContextID PRESENCE conditional }|
    -- This IE shall be present if at least one of the radio links has been successfully set up
    { ID id-CommunicationControlPortID CRITICALITY ignore TYPE CommunicationControlPortID PRESENCE optional }|
    { ID id-CauseLevel-RL-SetupFailureFDD CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureFDD PRESENCE mandatory }|
}

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    { ID      id-CriticalityDiagnostics
      PRESENCE optional },
    ...
}

RadioLinkSetupFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CauseLevel-RL-SetupFailureFDD ::= CHOICE {
    generalCause      GeneralCauseList-RL-SetupFailureFDD,
    rLSpecificCause   RLSpecificCauseList-RL-SetupFailureFDD,
    ...
}

GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    cause              Cause,
    iE-Extensions     ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
    ...
}

GeneralCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-SetupFailureFDD      Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD,
    successful-RL-InformationRespList-RL-SetupFailureFDD        Successful-RL-InformationRespList-RL-SetupFailureFDD OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { { Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD } }

Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD      CRITICALITY      ignore      TYPE      Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD      PRESENCE      mandatory }
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID          RL-ID,
    cause          Cause,
    iE-Extensions ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
    ...
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```



```

}
...
Successful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1.. maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}

Successful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID      id-Successful-RL-InformationRespItem-RL-SetupFailureFDD      CRITICALITY      ignore      TYPE      Successful-RL-InformationRespItem-RL-
SetupFailureFDD      PRESENCE      mandatory}
}

Successful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID                RL-ID,
  rL-Set-ID            RL-Set-ID,
  received-total-wide-band-power          Received-total-wide-band-power-Value,
  diversityIndication  DiversityIndication-RL-SetupFailureFDD,
  This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
the tabular message format in subclause 9.1.
  dSCH-InformationResponseList  DSCH-InformationRespList-RL-SetupFailureFDD      OPTIONAL,
  tFCI2-BearerInformationResponse  TFCI2-BearerInformationResponse      OPTIONAL,
  sSDT-SupportIndicator          SSdT-SupportIndicator,
  iE-Extensions                  ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs } }
  OPTIONAL,
  ...
}

Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DiversityIndication-RL-SetupFailureFDD ::= CHOICE {
  combining                Combining-RL-SetupFailureFDD,
  nonCombiningOrFirstRL   NonCombiningOrFirstRL-RL-SetupFailureFDD
}

Combining-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID                RL-ID,
  iE-Extensions        ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs } }      OPTIONAL,
  ...
}

CombiningItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE {
  dCH-InformationResponse  DCH-InformationResponse,
  iE-Extensions            ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs } }
  OPTIONAL,
  ...
}

NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
DSCH-InformationRespList-RL-SetupFailureFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationRespListIEs-RL-SetupFailureFDD }}

DSCH-InformationRespListIEs-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationResponse CRITICALITY ignore TYPE DSCH-InformationResponse PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK SETUP FAILURE TDD
--
-- *****

RadioLinkSetupFailureTDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkSetupFailureTDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkSetupFailureTDD-Extensions}} OPTIONAL,
  ...
}

RadioLinkSetupFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID CRITICALITY ignore TYPE CRNC-CommunicationContextID PRESENCE mandatory }|
  { ID id-CauseLevel-RL-SetupFailureTDD CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureTDD PRESENCE mandatory }|
  { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

RadioLinkSetupFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CauseLevel-RL-SetupFailureTDD ::= CHOICE {
  generalCause GeneralCauseList-RL-SetupFailureTDD,
  rLSpecificCause RLSpecificCauseList-RL-SetupFailureTDD,
  ...
}

GeneralCauseList-RL-SetupFailureTDD ::= SEQUENCE {
  cause Cause,
  iE-Extensions ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureTDD-ExtIEs } } OPTIONAL,
  ...
}

GeneralCauseItem-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RLSpecificCauseList-RL-SetupFailureTDD ::= SEQUENCE {
  unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD,

```

```

    iE-Extensions
    OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-
SetupFailureTDD} }

Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD      CRITICALITY ignore      TYPE      Unsuccessful-RL-InformationResp-RL-
SetupFailureTDD      PRESENCE      mandatory      }
}

Unsuccessful-RL-InformationResp-RL-SetupFailureTDD ::= SEQUENCE {
    rL-ID          RL-ID,
    cause          Cause,
    iE-Extensions ProtocolExtensionContainer { { Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs } }
    OPTIONAL,
    ...
}

Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK ADDITION REQUEST FDD
--
-- *****

RadioLinkAdditionRequestFDD ::= SEQUENCE {
    protocolIEs      ProtocolIE-Container      {{RadioLinkAdditionRequestFDD-IEs}},
    protocolExtensions      ProtocolExtensionContainer      {{RadioLinkAdditionRequestFDD-Extensions}}      OPTIONAL,
    ...
}

RadioLinkAdditionRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-NodeB-CommunicationContextID      CRITICALITY reject      TYPE      NodeB-CommunicationContextID      PRESENCE
mandatory      } |
    { ID id-Compressed-Mode-Deactivation-Flag      CRITICALITY reject      TYPE Compressed-Mode-Deactivation-Flag      PRESENCE optional } |
    { ID      id-RL-InformationList-RL-AdditionRqstFDD      CRITICALITY notify      TYPE      RL-InformationList-RL-AdditionRqstFDD
PRESENCE      mandatory      },
    ...
}

RadioLinkAdditionRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
RL-InformationList-RL-AdditionRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-AdditionRqstFDD}}
```

```
RL-InformationItemIE-RL-AdditionRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-RL-AdditionRqstFDD CRITICALITY notify TYPE RL-InformationItem-RL-AdditionRqstFDD
  PRESENCE mandatory}
}
```

```
RL-InformationItem-RL-AdditionRqstFDD ::= SEQUENCE {
  rL-ID RL-ID,
  c-ID C-ID,
  frameOffset FrameOffset,
  chipOffset ChipOffset,
  diversityControlField DiversityControlField,
  dl-CodeInformation FDD-DL-CodeInformation,
  initialDL-TransmissionPower DL-Power OPTIONAL,
  maximumDL-Power DL-Power OPTIONAL,
  minimumDL-Power DL-Power OPTIONAL,
  sSDT-CellIdentity SSdT-Cell-Identity OPTIONAL,
  transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { RL-InformationItem-RL-AdditionRqstFDD-ExtIEs} } OPTIONAL,
  ...
}
```

```
RL-InformationItem-RL-AdditionRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
-- *****
--
-- RADIO LINK ADDITION REQUEST TDD
--
-- *****
```

```
RadioLinkAdditionRequestTDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkAdditionRequestTDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-Extensions}} OPTIONAL,
  ...
}
```

```
RadioLinkAdditionRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID CRITICALITY reject TYPE NodeB-CommunicationContextID
  PRESENCE mandatory }|
  { ID id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD CRITICALITY reject TYPE UL-CCTrCH-InformationList-RL-AdditionRqstTDD
  PRESENCE optional }|
  { ID id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD CRITICALITY reject TYPE DL-CCTrCH-InformationList-RL-AdditionRqstTDD
  PRESENCE optional }|
  { ID id-RL-Information-RL-AdditionRqstTDD CRITICALITY reject TYPE RL-Information-RL-AdditionRqstTDD
  PRESENCE mandatory },
  ...
}
```

```

RadioLinkAdditionRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-AdditionRqstTDD

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    uL-DPCH-Information      UL-DPCH-InformationList-RL-AdditionRqstTDD    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}

UL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-UL-DPCH-InformationItem-RL-AdditionRqstTDD          CRITICALITY    notify          TYPE    UL-DPCH-InformationItem-RL-AdditionRqstTDD
      PRESENCE    mandatory}
}

UL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    uL-Timeslot-Information    UL-Timeslot-Information,
    iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-AdditionRqstTDD

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    dL-DPCH-Information      DL-DPCH-InformationList-RL-AdditionRqstTDD    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}

DL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {

```

```

    { ID id-DL-DPCH-InformationItem-RL-AdditionRqstTDD
      PRESENCE mandatory }
  }

DL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  dL-Timeslot-Information DL-Timeslot-Information,
  iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Information-RL-AdditionRqstTDD ::= SEQUENCE {
  rL-ID                RL-ID,
  c-ID                 C-ID,
  frameOffset          FrameOffset,
  diversityControlField DiversityControlField,
  initial-DL-Transmission-Power DL-Power OPTIONAL,
  maximumDL-Power      DL-Power OPTIONAL,
  minimumDL-Power      DL-Power OPTIONAL,
  dL-TimeSlotISCPInfo  DL-TimeslotISCPInfo OPTIONAL,
  iE-Extensions        ProtocolExtensionContainer { { RL-information-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

RL-information-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK ADDITION RESPONSE FDD
--
-- *****

RadioLinkAdditionResponseFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container {{RadioLinkAdditionResponseFDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-Extensions}} OPTIONAL,
  ...
}

RadioLinkAdditionResponseFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID
    PRESENCE mandatory } |
  { ID id-RL-InformationResponseList-RL-AdditionRspFDD
    PRESENCE mandatory } |
  { ID id-CriticalityDiagnostics
    PRESENCE optional },
  CRITICALITY ignore
  TYPE CRNC-CommunicationContextID
  TYPE RL-InformationResponseList-RL-
  TYPE CriticalityDiagnostics
}

```

```

}
...
}
RadioLinkAdditionResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
RL-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-
RL-AdditionRspFDD }}
RL-InformationResponseItemIE-RL-AdditionRspFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-RL-InformationResponseItem-RL-AdditionRspFDD      CRITICALITY      ignore      TYPE      RL-InformationResponseItem-RL-AdditionRspFDD
    PRESENCE      mandatory}
}
RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
    rL-ID              RL-ID,
    rL-Set-ID          RL-Set-ID,
    received-total-wide-band-power          Received-total-wide-band-power-Value,
    diversityIndication          DiversityIndication-RL-AdditionRspFDD,
    This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    the tabular message format in subclause 9.1.
    sSDT-SupportIndicator          SSDT-SupportIndicator,
    iE-Extensions          ProtocolExtensionContainer { { RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} }
    OPTIONAL,
    ...
}
RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
DiversityIndication-RL-AdditionRspFDD ::= CHOICE {
    combining          Combining-RL-AdditionRspFDD,
    non-combining          Non-Combining-RL-AdditionRspFDD
}
Combining-RL-AdditionRspFDD ::= SEQUENCE {
    rL-ID              RL-ID,
    iE-Extensions          ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs} }      OPTIONAL,
    ...
}
CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
Non-Combining-RL-AdditionRspFDD ::= SEQUENCE {
    dCH-InformationResponse          DCH-InformationResponse,
    iE-Extensions          ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspFDD-ExtIEs} }      OPTIONAL,
    ...
}

```

```

Non-CombiningItem-RL-AdditionRspFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK ADDITION RESPONSE TDD
--
-- *****

RadioLinkAdditionResponseTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container   {{RadioLinkAdditionResponseTDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{RadioLinkAdditionResponseTDD-Extensions}}  OPTIONAL,
  ...
}

RadioLinkAdditionResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID   id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE CRNC-CommunicationContextID
  PRESENCE mandatory }|
  { ID   id-RL-InformationResponse-RL-AdditionRspTDD  CRITICALITY ignore          TYPE RL-InformationResponse-RL-AdditionRspTDD
  PRESENCE mandatory }|
  { ID   id-CriticalityDiagnostics                CRITICALITY ignore          TYPE CriticalityDiagnostics          PRESENCE
  optional },
  ...
}

RadioLinkAdditionResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
  rL-ID                RL-ID,
  uL-TimeSlot-ISCP-Info  UL-TimeSlot-ISCP-Info,
  uL-PhysCH-SF-Variation  UL-PhysCH-SF-Variation,
  dCH-Information        DCH-Information-RL-AdditionRspTDD          OPTIONAL,
  dSCH-InformationResponseList  DSCH-InformationResponseList-RL-AdditionRspTDD  OPTIONAL,
  uSCH-InformationResponseList  USCH-InformationResponseList-RL-AdditionRspTDD  OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { { RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} }  OPTIONAL,
  ...
}

RL-InformationResponse-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
  diversityIndication    DiversityIndication-RL-AdditionRspTDD,
  This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
  the tabular message format in subclause 9.1.
  iE-Extensions          ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs} }  OPTIONAL,
  ...
}

```



```

DCH-Information-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-AdditionRspTDD ::= CHOICE {
    combining                Combining-RL-AdditionRspTDD,
    non-Combining            Non-Combining-RL-AdditionRspTDD
}

Combining-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                    RL-ID,
    iE-Extensions            ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs } }    OPTIONAL,
    ...
}

CombiningItem-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Non-Combining-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-InformationResponse  DCH-InformationResponse,
    iE-Extensions            ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspTDD-ExtIEs } }    OPTIONAL,
    ...
}

Non-CombiningItem-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-AdditionRspTDD }}

DSCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationResponse  CRITICALITY ignore  TYPE DSCH-InformationResponse  PRESENCE mandatory }
}

USCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-AdditionRspTDD }}

USCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
    { ID id-USCH-InformationResponse  CRITICALITY ignore  TYPE USCH-InformationResponse  PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK ADDITION FAILURE FDD
--
-- *****

RadioLinkAdditionFailureFDD ::= SEQUENCE {
    protocolIEs              ProtocolIE-Container    {{RadioLinkAdditionFailureFDD-IEs}},
    protocolExtensions        ProtocolExtensionContainer {{RadioLinkAdditionFailureFDD-Extensions}}    OPTIONAL,
    ...
}

```

```

RadioLinkAdditionFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CRNC-CommunicationContextID      CRITICALITY  ignore      TYPE      CRNC-CommunicationContextID      PRESENCE mandatory }|
  { ID      id-CauseLevel-RL-AdditionFailureFDD  CRITICALITY  ignore      TYPE      CauseLevel-RL-AdditionFailureFDD   PRESENCE mandatory }|
  { ID      id-CriticalityDiagnostics            CRITICALITY  ignore      TYPE      CriticalityDiagnostics              PRESENCE optional  },
  ...
}

RadioLinkAdditionFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CauseLevel-RL-AdditionFailureFDD ::= CHOICE {
  generalCause      GeneralCauseList-RL-AdditionFailureFDD,
  rLSpecificCause   RLSpecificCauseList-RL-AdditionFailureFDD,
  ...
}

GeneralCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
  cause              Cause,
  iE-Extensions      ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs} }      OPTIONAL,
  ...
}

GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RLSpecificCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
  unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD      Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD,
  successful-RL-InformationRespList-RL-AdditionFailureFDD         Successful-RL-InformationRespList-RL-AdditionFailureFDD OPTIONAL,
  iE-Extensions           ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs} }      OPTIONAL,
  ...
}

RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureFDD }}

Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID      id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD      CRITICALITY  ignore      TYPE      Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD      PRESENCE  mandatory}
}

Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID              RL-ID,
  cause              Cause,
  iE-Extensions      ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs} }      OPTIONAL,
  ...
}

```

```

Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Successful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-2)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}

Successful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Successful-RL-InformationRespItem-RL-
AdditionFailureFDD PRESENCE mandatory}
}

Successful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
    rL-ID RL-ID,
    rL-Set-ID RL-Set-ID,
    received-total-wide-band-power Received-total-wide-band-power-Value,
    diversityIndication DiversityIndication-RL-AdditionFailureFDD,
    This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    the tabular message format in subclause 9.1.
    sSDT-SupportIndicator SSDT-SupportIndicator,
    iE-Extensions ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs} }
    OPTIONAL,
    ...
}

Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-AdditionFailureFDD ::= CHOICE {
    combining Combining-RL-AdditionFailureFDD,
    non-Combining Non-Combining-RL-AdditionFailureFDD
}

Combining-RL-AdditionFailureFDD ::= SEQUENCE {
    rL-ID RL-ID,
    iE-Extensions ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Non-Combining-RL-AdditionFailureFDD ::= SEQUENCE {
    dCH-InformationResponse DCH-InformationResponse,
    iE-Extensions ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

-- *****
--
-- RADIO LINK ADDITION FAILURE TDD
--
-- *****

RadioLinkAdditionFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkAdditionFailureTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkAdditionFailureTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkAdditionFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID      CRITICALITY    ignore    TYPE    CRNC-CommunicationContextID
    PRESENCE  mandatory    }|
    { ID      id-CauseLevel-RL-AdditionFailureTDD  CRITICALITY    ignore    TYPE    CauseLevel-RL-AdditionFailureTDD
    PRESENCE  mandatory    }|
    { ID      id-CriticalityDiagnostics           CRITICALITY    ignore    TYPE    CriticalityDiagnostics
    PRESENCE  optional    },
    ...
}

RadioLinkAdditionFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CauseLevel-RL-AdditionFailureTDD ::= CHOICE {
    generalCause          GeneralCauseList-RL-AdditionFailureTDD,
    rLSpecificCause      RLSpecificCauseList-RL-AdditionFailureTDD,
    ...
}

GeneralCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs} }    OPTIONAL,
    ...
}

GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD  Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD,
    iE-Extensions        ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs} }
    OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-
AdditionFailureTDD} }

Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD NBAP-PROTOCOL-IES ::= {
  { ID id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD   CRITICALITY ignore   TYPE Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD
  PRESENCE mandatory }
}

Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD ::= SEQUENCE {
  rL-ID                               RL-ID,
  cause                               Cause,
  iE-Extensions                       ProtocolExtensionContainer { { Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD-ExtIEs } }
  OPTIONAL,
  ...
}

Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE FDD
--
-- *****

RadioLinkReconfigurationPrepareFDD ::= SEQUENCE {
  protocolIEs           ProtocolIE-Container   {{RadioLinkReconfigurationPrepareFDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareFDD-Extensions}}   OPTIONAL,
  ...
}

RadioLinkReconfigurationPrepareFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID   CRITICALITY   reject   TYPE NodeB-CommunicationContextID   PRESENCE
  mandatory } |
  { ID id-UL-DPCH-Information-RL-ReconfPrepFDD   CRITICALITY   reject   TYPE UL-DPCH-Information-RL-ReconfPrepFDD   PRESENCE
  optional } |
  { ID id-DL-DPCH-Information-RL-ReconfPrepFDD   CRITICALITY   reject   TYPE DL-DPCH-Information-RL-ReconfPrepFDD   PRESENCE
  optional } |
  { ID id-FDD-DCHs-to-Modify   CRITICALITY   reject   TYPE FDD-DCHs-to-Modify   PRESENCE optional } |
  { ID id-DCHs-to-Add-FDD   CRITICALITY   reject   TYPE DCH-FDD-Information   PRESENCE optional } |
  { ID id-DCH-DeleteList-RL-ReconfPrepFDD   CRITICALITY   reject   TYPE DCH-DeleteList-RL-ReconfPrepFDD   PRESENCE
  optional } |
  { ID id-DSCH-ModifyList-RL-ReconfPrepFDD   CRITICALITY   reject   TYPE DSCH-ModifyList-RL-ReconfPrepFDD   PRESENCE
  optional } |
  { ID id-DSCHs-to-Add-FDD   CRITICALITY   reject   TYPE DSCH-FDD-Information   PRESENCE optional } |
  { ID id-DSCH-DeleteList-RL-ReconfPrepFDD   CRITICALITY   reject   TYPE DSCH-DeleteList-RL-ReconfPrepFDD   PRESENCE
  optional } |
  { ID id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD   CRITICALITY   reject   TYPE TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD
  PRESENCE optional } |
}

```

```

    { ID id-RL-InformationList-RL-ReconfPrepFDD          CRITICALITY reject          TYPE RL-InformationList-RL-ReconfPrepFDD          PRESENCE
      optional }|
    { ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject          TYPE Transmission-Gap-Pattern-Sequence-Information
  PRESENCE optional },
  ...
}

RadioLinkReconfigurationPrepareFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
  ul-ScramblingCode          UL-ScramblingCode          OPTIONAL,
  ul-SIR-Target              UL-SIR                    OPTIONAL,
  minUL-ChannelisationCodeLength  MinUL-ChannelisationCodeLength  OPTIONAL,
  maxNrOfUL-DPDCHs          MaxNrOfUL-DPDCHs          OPTIONAL,
  -- This IE shall be present if minUL-ChannelisationCodeLength IE is set to 4
  ul-PunctureLimit          PunctureLimit            OPTIONAL,
  tFCS                      TFCS                      OPTIONAL,
  ul-DPCCH-SlotFormat        UL-DPCCH-SlotFormat        OPTIONAL,
  diversityMode              DiversityMode              OPTIONAL,
  sSDT-CellIDLength          SSDT-CellID-Length        OPTIONAL,
  s-FieldLength              S-FieldLength            OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs } }  OPTIONAL,
  ...
}

UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
  tFCS                      TFCS                      OPTIONAL,
  dl-DPCH-SlotFormat        DL-DPCH-SlotFormat        OPTIONAL,
  tFCI-SignallingMode        TFCI-SignallingMode        OPTIONAL,
  tFCI-Presence              TFCI-Presence              OPTIONAL,
  -- This IE shall be present if the DL DPCH Slot Format IE is set to any of the values from 12 to 16
  multiplexingPosition        MultiplexingPosition        OPTIONAL,
  pDSCH-CodeMapping          PDSCH-CodeMapping          OPTIONAL,
  pDSCH-RL-ID                RL-ID                      OPTIONAL,
  limitedPowerIncrease        LimitedPowerIncrease        OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs } }  OPTIONAL,
  ...
}

DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepFDD

DCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
  dCH-ID                    DCH-ID,

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```

    iE-Extensions          ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-ModifyList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-ModifyItemIE-RL-ReconfPrepFDD }}

DSCH-ModifyItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-DSCH-ModifyItem-RL-ReconfPrepFDD      CRITICALITY reject          TYPE      DSCH-ModifyItem-RL-ReconfPrepFDD      PRESENCE mandatory}
}

DSCH-ModifyItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    dl-TransportFormatSet  TransportFormatSet          OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority  FrameHandlingPriority       OPTIONAL,
    toAWS                  ToAWS                      OPTIONAL,
    toAWE                  ToAWE                      OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
    ...
}

DSCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-DeleteItemIE-RL-ReconfPrepFDD }}

DSCH-DeleteItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-DSCH-DeleteItem-RL-ReconfPrepFDD      CRITICALITY reject          TYPE      DSCH-DeleteItem-RL-ReconfPrepFDD      PRESENCE mandatory}
}

DSCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
    ...
}

DSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD ::= CHOICE {
    addOrModify          AddOrModify-TFCI2-RL-ReconfPrepFDD,
    delete              NULL
}

AddOrModify-TFCI2-RL-ReconfPrepFDD ::= SEQUENCE {
    toAWS              ToAWS,

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```

toAWE
iE-Extensions
...
}

AddOrModify-TFCI2-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

RL-InformationList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfPrepFDD }}

RL-InformationItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
{ ID id-RL-InformationItem-RL-ReconfPrepFDD CRITICALITY reject TYPE RL-InformationItem-RL-ReconfPrepFDD PRESENCE
mandatory}
}

RL-InformationItem-RL-ReconfPrepFDD ::= SEQUENCE {
rL-ID RL-ID,
dl-CodeInformation FDD-DL-CodeInformation OPTIONAL,
maxDL-Power DL-Power OPTIONAL,
minDL-Power DL-Power OPTIONAL,
sSDT-Indication SSdT-Indication OPTIONAL,
sSDT-Cell-Identity SSdT-Cell-Identity OPTIONAL,
-- The IE shall be present if the SSdT Indication IE is set to "SSdT Active in the UE"
transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
-- This IE shall be present if Diversity Mode IE is present in UL DPCH Information IE and it is not set to "none"
iE-Extensions ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
...
}

RL-InformationItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE TDD
--
-- *****

RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
protocolIEs ProtocolIE-Container {{RadioLinkReconfigurationPrepareTDD-IEs}},
protocolExtensions ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}} OPTIONAL,
...
}

RadioLinkReconfigurationPrepareTDD-IEs NBAP-PROTOCOL-IES ::= {
{ ID id-NodeB-CommunicationContextID CRITICALITY reject TYPE NodeB-CommunicationContextID
PRESENCE mandatory } |
{ ID id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
PRESENCE optional } |
{ ID id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-CCTrCH-InformationModifyList-RL-
ReconfPrepTDD PRESENCE optional } |

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{ ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-CCTrCH-InformationDeleteList-RL-
ReconfPrepTDD PRESENCE optional } |
{ ID id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
PRESENCE optional } |
{ ID id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-CCTrCH-InformationModifyList-RL-
ReconfPrepTDD PRESENCE optional } |
{ ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-CCTrCH-InformationDeleteList-RL-
ReconfPrepTDD PRESENCE optional } |
{ ID id-TDD-DCHs-to-Modify CRITICALITY reject TYPE TDD-DCHs-to-Modify PRESENCE optional
} |
{ ID id-DCHs-to-Add-TDD CRITICALITY reject TYPE DCH-TDD-Information PRESENCE optional
} |
{ ID id-DCH-DeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepTDD
PRESENCE optional } |
{ ID id-DSCH-Information-ModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE DSCH-Information-ModifyList-RL-ReconfPrepTDD
PRESENCE optional } |
{ ID id-DSCHs-to-Add-TDD CRITICALITY reject TYPE DSCH-TDD-Information PRESENCE optional } |
{ ID id-DSCH-Information-DeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE DSCH-Information-DeleteList-RL-ReconfPrepTDD
PRESENCE optional } |
{ ID id-USCH-Information-ModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE USCH-Information-ModifyList-RL-ReconfPrepTDD
PRESENCE optional } |
{ ID id-USCH-Information-Add CRITICALITY reject TYPE USCH-Information PRESENCE optional } |
{ ID id-USCH-Information-DeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE USCH-Information-DeleteList-RL-ReconfPrepTDD
PRESENCE optional } |
{ ID id-RL-Information-RL-ReconfPrepTDD CRITICALITY reject TYPE RL-Information-RL-ReconfPrepTDD
PRESENCE optional },
...
}

RadioLinkReconfigurationPrepareTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
cCTrCH-ID CCTrCH-ID,
tFCS TFCS,
tFCI-Coding TFCI-Coding,
punctureLimit PunctureLimit,
ul-DPCH-InformationList UL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
iE-Extensions ProtocolExtensionContainer { { UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
...
}

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {

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```

    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD   CRITICALITY reject   TYPE UL-DPCH-InformationAddItem-RL-ReconfPrepTDD   PRESENCE
mandatory }
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    uL-Timeslot-Information    UL-Timeslot-Information,
    iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } }   OPTIONAL,
    ...
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                  CCTrCH-ID,
    tFCS                        TFCS                               OPTIONAL,
    tFCI-Coding                 TFCI-Coding                       OPTIONAL,
    punctureLimit               PunctureLimit                     OPTIONAL,
    ul-DPCH-InformationAddList   UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD   OPTIONAL,
    ul-DPCH-InformationModifyList UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD   OPTIONAL,
    ul-DPCH-InformationDeleteList UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD   OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
OPTIONAL,
    ...
}

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD   CRITICALITY reject   TYPE UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
PRESENCE mandatory }
}

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    uL-Timeslot-Information    UL-Timeslot-Information,
    iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
OPTIONAL,
    ...
}

```

```

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD }}

UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE UL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod          OPTIONAL,
    repetitionLength          RepetitionLength          OPTIONAL,
    tdd-DPCHOffset            TDD-DPCHOffset            OPTIONAL,
    uL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD  UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlot                  TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType          OPTIONAL,
    tFCI-Presence              TFCI-Presence          OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD  UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                    DPCH-ID,
    tdd-ChannelisationCode      TDD-ChannelisationCode          OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {

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```

}
...
}
UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE UL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dPCH-ID                DPCH-ID,
  iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCtRch-ID              CCTrCH-ID,
  iE-Extensions          ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCtRch-ID              CCTrCH-ID,
  tFCS                   TFCS,
  tFCI-Coding            TFCI-Coding,
  punctureLimit          PunctureLimit,
  cCtRch-TPCList         CCTrCH-TPCAddList-RL-ReconfPrepTDD          OPTIONAL,
  dl-DPCH-InformationList DL-DPCH-InformationAddList-RL-ReconfPrepTDD  OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { { DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

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}

CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD

CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID          CCTrCH-ID,
    iE-Extensions      ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
    ...
}

CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD } }

DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD    CRITICALITY reject          TYPE DL-DPCH-InformationAddItem-RL-ReconfPrepTDD    PRESENCE
    mandatory }
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dl-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions        ProtocolExtensionContainer { { DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
    ...
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID          CCTrCH-ID,
    tFCS                TFCS                                OPTIONAL,
    tFCI-Coding         TFCI-Coding                        OPTIONAL,
    punctureLimit       PunctureLimit                      OPTIONAL,
    cCCTrCH-TPCList     CCTrCH-TPCModifyList-RL-ReconfPrepTDD  OPTIONAL,
    dl-DPCH-InformationAddList DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD  OPTIONAL,
    dl-DPCH-InformationModifyList DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
    dl-DPCH-InformationDeleteList DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD  OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID          CCTrCH-ID,
    iE-Extensions      ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
    PRESENCE mandatory }
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dL-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-ModifyItem-RL-
    ReconfPrepTDD PRESENCE mandatory }
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod OPTIONAL,
    repetitionLength      RepetitionLength OPTIONAL,
    tdd-DPCHOffset        TDD-DPCHOffset OPTIONAL,
    dL-Timeslot-InformationAddModify-ModifyList-RL-ReconfPrepTDD DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
    tFCI-Presence            TFCI-Presence OPTIONAL,
    dL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCode TDD-ChannelisationCode OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD } }

DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD PRESENCE mandatory }
}

DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD

DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dCH-ID                    DCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-ModifyItem-RL-ReconfPrepTDD

DSCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                    DSCH-ID,
    cCTrCH-ID                  CCTrCH-ID
    transportFormatSet          TransportFormatSet
    allocationRetentionPriority AllocationRetentionPriority
    frameHandlingPriority       FrameHandlingPriority
    toAWS                       ToAWS
    toAWE                       ToAWE
    transportBearerRequestIndicator TransportBearerRequestIndicator
    iE-Extensions            ProtocolExtensionContainer { { DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-DeleteItem-RL-ReconfPrepTDD

DSCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                    DSCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {

```



```

}
...
USCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-ModifyItem-RL-ReconfPrepTDD

USCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    transportFormatSet     TransportFormatSet OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    cCTrCH-ID              CCTrCH-ID OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    iE-Extensions          ProtocolExtensionContainer { { USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-DeleteItem-RL-ReconfPrepTDD

USCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-ReconfPrepTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    maxDL-Power          DL-Power OPTIONAL,
    minDL-Power          DL-Power OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { RL-Information-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-InitDL-Power CRITICALITY ignore EXTENSION DL-Power PRESENCE optional },
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION READY
--
-- *****

RadioLinkReconfigurationReady ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container {{RadioLinkReconfigurationReady-IEs}},

```

```

    protocolExtensions      ProtocolExtensionContainer {{RadioLinkReconfigurationReady-Extensions}}  OPTIONAL,
    ...
}

RadioLinkReconfigurationReady-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore TYPE CRNC-CommunicationContextID
    PRESENCE mandatory } |
    { ID id-RL-InformationResponseList-RL-ReconfReady CRITICALITY ignore TYPE RL-InformationResponseList-RL-ReconfReady
    PRESENCE optional } |
    { ID id-CriticalityDiagnostics                CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE
    optional },
    ...
}

RadioLinkReconfigurationReady-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationResponseList-RL-ReconfReady ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-RL-
ReconfReady}}

RL-InformationResponseItemIE-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfReady CRITICALITY ignore TYPE RL-InformationResponseItem-RL-ReconfReady
    PRESENCE mandatory}
}

RL-InformationResponseItem-RL-ReconfReady ::= SEQUENCE {
    rL-ID RL-ID,
    dCH-InformationResponseList-RL-ReconfReady DCH-InformationResponseList-RL-ReconfReady OPTIONAL,
    dSCH-InformationResponseList-RL-ReconfReady DSCH-InformationResponseList-RL-ReconfReady OPTIONAL,
    uSCH-InformationResponseList-RL-ReconfReady USCH-InformationResponseList-RL-ReconfReady OPTIONAL, -- TDD only
    tFCI2-BearerInformationResponse TFCl2-BearerInformationResponse OPTIONAL, --FDD only
    iE-Extensions ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfReady-ExtIEs } } OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-ReconfReady-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfReady }}

DCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE mandatory }
}

DSCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-ReconfReady }}

DSCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationResponse CRITICALITY ignore TYPE DSCH-InformationResponse PRESENCE mandatory }
}

USCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-ReconfReady }}

```

```

USCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
  { ID id-USCH-InformationResponse  CRITICALITY ignore  TYPE USCH-InformationResponse  PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK RECONFIGURATION FAILURE
--
-- *****

RadioLinkReconfigurationFailure ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{RadioLinkReconfigurationFailure-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{RadioLinkReconfigurationFailure-Extensions}}  OPTIONAL,
  ...
}

RadioLinkReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID  CRITICALITY ignore  TYPE CRNC-CommunicationContextID  PRESENCE mandatory } |
  { ID id-CauseLevel-RL-ReconfFailure  CRITICALITY ignore  TYPE CauseLevel-RL-ReconfFailure  PRESENCE mandatory } |
  { ID id-CriticalityDiagnostics  CRITICALITY ignore  TYPE CriticalityDiagnostics  PRESENCE optional },
  ...
}

RadioLinkReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CauseLevel-RL-ReconfFailure ::= CHOICE {
  generalCause          GeneralCauseList-RL-ReconfFailure,
  rLSpecificCause      RLSpecificCauseList-RL-ReconfFailure,
  ...
}

GeneralCauseList-RL-ReconfFailure ::= SEQUENCE {
  cause                Cause,
  iE-Extensions        ProtocolExtensionContainer { { GeneralCauseItem-RL-ReconfFailure-ExtIEs} }  OPTIONAL,
  ...
}

GeneralCauseItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RLSpecificCauseList-RL-ReconfFailure ::= SEQUENCE {
  rL-ReconfigurationFailureList-RL-ReconfFailure  RL-ReconfigurationFailureList-RL-ReconfFailure  OPTIONAL,
  iE-Extensions  ProtocolExtensionContainer { { RLSpecificCauseItem-RL-ReconfFailure-ExtIEs} }  OPTIONAL,
  ...
}

RLSpecificCauseItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}

RL-ReconfigurationFailureList-RL-ReconfFailure ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-
ReconfigurationFailureItemIE-RL-ReconfFailure}}

RL-ReconfigurationFailureItemIE-RL-ReconfFailure NBAP-PROTOCOL-IES ::= {
  { ID      id-RL-ReconfigurationFailureItem-RL-ReconfFailure      CRITICALITY  ignore    TYPE  RL-ReconfigurationFailureItem-RL-
ReconfFailure      PRESENCE  mandatory}
}

RL-ReconfigurationFailureItem-RL-ReconfFailure ::= SEQUENCE {
  rL-ID          RL-ID,
  cause          Cause,
  iE-Extensions ProtocolExtensionContainer { { RL-ReconfigurationFailureItem-RL-ReconfFailure-ExtIEs} }
  OPTIONAL,
  ...
}

RL-ReconfigurationFailureItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION COMMIT
--
-- *****

RadioLinkReconfigurationCommit ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container  {{RadioLinkReconfigurationCommit-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkReconfigurationCommit-Extensions}}  OPTIONAL,
  ...
}

RadioLinkReconfigurationCommit-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-NodeB-CommunicationContextID      CRITICALITY  ignore    TYPE  NodeB-CommunicationContextID      PRESENCE mandatory } |
  { ID      id-CFN                               CRITICALITY  ignore    TYPE  CFN                               PRESENCE mandatory } |
  { ID      id-Active-Pattern-Sequence-Information CRITICALITY  ignore    TYPE  Active-Pattern-Sequence-Information PRESENCE optional },
  ...
}

RadioLinkReconfigurationCommit-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION CANCEL
--
-- *****

RadioLinkReconfigurationCancel ::= SEQUENCE {

```

```

    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationCancel-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationCancel-Extensions}}    OPTIONAL,
    ...
}

RadioLinkReconfigurationCancel-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-NodeB-CommunicationContextID      CRITICALITY    ignore      TYPE      NodeB-CommunicationContextID      PRESENCE mandatory  },
  ...
}

RadioLinkReconfigurationCancel-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST FDD
--
-- *****

RadioLinkReconfigurationRequestFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationRequestFDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationRequestFDD-Extensions}}    OPTIONAL,
  ...
}

RadioLinkReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-NodeB-CommunicationContextID      CRITICALITY    reject      TYPE      NodeB-CommunicationContextID      PRESENCE
  mandatory  } |
  { ID      id-UL-DPCH-Information-RL-ReconfRqstFDD      CRITICALITY    reject      TYPE      UL-DPCH-Information-RL-ReconfRqstFDD      PRESENCE
  optional  } |
  { ID      id-DL-DPCH-Information-RL-ReconfRqstFDD      CRITICALITY    reject      TYPE      DL-DPCH-Information-RL-ReconfRqstFDD      PRESENCE
  optional  } |
  { ID      id-FDD-DCHs-to-Modify                    CRITICALITY    reject      TYPE      FDD-DCHs-to-Modify                    PRESENCE optional } |
  { ID      id-DCHs-to-Add-FDD                        CRITICALITY    reject      TYPE      DCH-FDD-Information                    PRESENCE optional } |
  { ID      id-DCH-DeleteList-RL-ReconfRqstFDD      CRITICALITY    reject      TYPE      DCH-DeleteList-RL-ReconfRqstFDD      PRESENCE
  optional  } |
  { ID      id-RL-InformationList-RL-ReconfRqstFDD      CRITICALITY    reject      TYPE      RL-InformationList-RL-ReconfRqstFDD      PRESENCE
  optional  } |
  { ID      id-Transmission-Gap-Pattern-Sequence-Information      CRITICALITY    reject      TYPE      Transmission-Gap-Pattern-Sequence-Information
  PRESENCE optional },
  ...
}

RadioLinkReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
  ul-TFCS              TFCS              OPTIONAL,
  iE-Extensions        ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
  ...
}

```

```

}

UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
    dl-TFCS                TFCS                OPTIONAL,
    tFCI-SignallingMode    tFCI-SignallingMode    OPTIONAL,
    limitedPowerIncrease    LimitedPowerIncrease    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstFDD

DCH-DeleteItem-RL-ReconfRqstFDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfRqstFDD}}

RL-InformationItemIE-RL-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID    id-RL-InformationItem-RL-ReconfRqstFDD    CRITICALITY    reject    TYPE RL-InformationItem-RL-ReconfRqstFDD
    PRESENCE    mandatory}
}

RL-InformationItem-RL-ReconfRqstFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    maxDL-Power          DL-Power    OPTIONAL,
    minDL-Power          DL-Power    OPTIONAL,
    dl-CodeInformation    FDD-DL-CodeInformation    OPTIONAL,
    -- The IE shall be present if the Transmission Gap Pattern Sequence Information IE is included and the indicated Downlink Compressed Mode method for
    at least one of the included Transmission Gap Pattern Sequence is set to "SF/2".
    iE-Extensions          ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

RL-InformationItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- *****

RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY reject          TYPE NodeB-CommunicationContextID
    PRESENCE mandatory } |
    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE UL-CCTrCH-InformationModifyList-RL-
ReconfRqstTDD          PRESENCE optional } |
    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE UL-CCTrCH-InformationDeleteList-RL-
ReconfRqstTDD          PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE DL-CCTrCH-InformationModifyList-RL-
ReconfRqstTDD          PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE DL-CCTrCH-InformationDeleteList-RL-
ReconfRqstTDD          PRESENCE optional } |
    { ID id-TDD-DCHs-to-Modify          CRITICALITY reject          TYPE TDD-DCHs-to-Modify          PRESENCE optional } |
    { ID id-DCHs-to-Add-TDD          CRITICALITY reject          TYPE DCH-TDD-Information          PRESENCE
optional } |
    { ID id-DCH-DeleteList-RL-ReconfRqstTDD          CRITICALITY reject          TYPE DCH-DeleteList-RL-ReconfRqstTDD
PRESENCE optional } |
    { ID id-RL-Information-RL-ReconfRqstTDD          CRITICALITY ignore          TYPE RL-Information-RL-ReconfRqstTDD
PRESENCE optional },
    ...
}

RadioLinkReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD          CRITICALITY notify          TYPE UL-CCTrCH-InformationModifyItem-RL-
ReconfRqstTDD          PRESENCE mandatory }
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS          OPTIONAL,
    punctureLimit          PunctureLimit    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

```

```

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD          CRITICALITY    notify          TYPE  UL-CCTrCH-InformationDeleteItem-RL-
ReconfRqstTDD          PRESENCE      mandatory}
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD          CRITICALITY    notify          TYPE  DL-CCTrCH-InformationModifyItem-RL-
ReconfRqstTDD          PRESENCE      mandatory}
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    tFCS                      TFCS          OPTIONAL,
    punctureLimit            PunctureLimit OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD          CRITICALITY    notify          TYPE  DL-CCTrCH-InformationDeleteItem-RL-
ReconfRqstTDD          PRESENCE      mandatory}
}

```



```

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    iE-Extensions     ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD

DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    dCH-ID          DCH-ID,
    iE-Extensions  ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs } }      OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-ReconfRqstTDD ::= SEQUENCE {
    rL-ID          RL-ID,
    maxDL-Power   DL-Power      OPTIONAL,
    minDL-Power   DL-Power      OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstTDD-ExtIEs } }      OPTIONAL,
    ...
}

RL-InformationItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION RESPONSE
--
-- *****

RadioLinkReconfigurationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{RadioLinkReconfigurationResponse-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationResponse-Extensions}}  OPTIONAL,
    ...
}

RadioLinkReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID          CRITICALITY ignore      TYPE      CRNC-CommunicationContextID          PRESENCE
    mandatory } |
    { ID      id-RL-InformationResponseList-RL-ReconfRsp      CRITICALITY ignore      TYPE      RL-InformationResponseList-RL-ReconfRsp      PRESENCE
    optional  } |

```

```

    { ID id-CriticalityDiagnostics
      optional },
    ...
  }

RadioLinkReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationResponseList-RL-ReconfRsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationResponseItemIE-RL-ReconfRsp}}

RL-InformationResponseItemIE-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponseItem-RL-ReconfRsp
    PRESENCE mandatory}
    CRITICALITY ignore
    TYPE RL-InformationResponseItem-RL-ReconfRsp
  }

RL-InformationResponseItem-RL-ReconfRsp ::= SEQUENCE {
  rL-ID RL-ID,
  dCH-InformationResponseList-RL-ReconfRsp DCH-InformationResponseList-RL-ReconfRsp OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfRsp-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationResponseItem-RL-ReconfRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-InformationResponseList-RL-ReconfRsp ::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfRsp }}

DCH-InformationResponseListIEs-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse
    CRITICALITY ignore
    TYPE DCH-InformationResponse
    PRESENCE mandatory }
  }

-- *****
--
-- RADIO LINK DELETION REQUEST
--
-- *****

RadioLinkDeletionRequest ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkDeletionRequest-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkDeletionRequest-Extensions}} OPTIONAL,
  ...
}

RadioLinkDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID
    mandatory } |
  { ID id-CRNC-CommunicationContextID
    mandatory } |
  { ID id-RL-informationList-RL-DeletionRqst
    mandatory } ,
    CRITICALITY reject
    TYPE NodeB-CommunicationContextID
    PRESENCE
    CRITICALITY reject
    TYPE CRNC-CommunicationContextID
    PRESENCE
    CRITICALITY notify
    TYPE RL-informationList-RL-DeletionRqst
    PRESENCE

```

```

}
...
RadioLinkDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
}
...
RL-informationList-RL-DeletionRqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-informationItemIE-RL-DeletionRqst}}

RL-informationItemIE-RL-DeletionRqst NBAP-PROTOCOL-IES ::= {
  { ID      id-RL-informationItem-RL-DeletionRqst      CRITICALITY      notify      TYPE      RL-informationItem-RL-DeletionRqst
  PRESENCE      mandatory}
}

RL-informationItem-RL-DeletionRqst ::= SEQUENCE {
  rL-ID      RL-ID,
  iE-Extensions      ProtocolExtensionContainer { { RL-informationItem-RL-DeletionRqst-ExtIEs} }      OPTIONAL,
  ...
}

RL-informationItem-RL-DeletionRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
}
...

-- *****
--
-- RADIO LINK DELETION RESPONSE
--
-- *****

RadioLinkDeletionResponse ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container      {{RadioLinkDeletionResponse-IEs}},
  protocolExtensions      ProtocolExtensionContainer      {{RadioLinkDeletionResponse-Extensions}}      OPTIONAL,
  ...
}

RadioLinkDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CRNC-CommunicationContextID      CRITICALITY      ignore      TYPE      CRNC-CommunicationContextID      PRESENCE mandatory
  }|
  { ID      id-CriticalityDiagnostics      CRITICALITY      ignore      TYPE      CriticalityDiagnostics      PRESENCE optional },
  ...
}

RadioLinkDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
}
...

-- *****
--
-- DL POWER CONTROL REQUEST FDD
--
-- *****

```

```

DL-PowerControlRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DL-PowerControlRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DL-PowerControlRequest-Extensions}}    OPTIONAL,
    ...
}

DL-PowerControlRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY ignore          TYPE          NodeB-CommunicationContextID          PRESENCE mandatory } |
    { ID id-PowerAdjustmentType                  CRITICALITY ignore          TYPE PowerAdjustmentType          PRESENCE mandatory } |
    { ID id-DLReferencePower                    CRITICALITY ignore          TYPE DL-Power                    PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common'
    { ID id-InnerLoopDLPCStatus                  CRITICALITY ignore          TYPE InnerLoopDLPCStatus          PRESENCE optional } |
    { ID id-DLReferencePowerList-DL-PC-Rqst      CRITICALITY ignore          TYPE DL-ReferencePowerInformationList-DL-PC-Rqst PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Individual'
    { ID id-MaxAdjustmentStep                    CRITICALITY ignore          TYPE MaxAdjustmentStep            PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
    { ID id-AdjustmentPeriod                     CRITICALITY ignore          TYPE AdjustmentPeriod             PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
    { ID id-AdjustmentRatio                      CRITICALITY ignore          TYPE ScaledAdjustmentRatio        PRESENCE conditional },
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
    ...
}

DL-PowerControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-ReferencePowerInformationList-DL-PC-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{DL-ReferencePowerInformationItemIE-DL-PC-Rqst }}

DL-ReferencePowerInformationItemIE-DL-PC-Rqst NBAP-PROTOCOL-IES ::= {
    { ID id-DL-ReferencePowerInformationItem-DL-PC-Rqst          CRITICALITY          ignore          TYPE          DL-ReferencePowerInformationItem-DL-PC-Rqst
    PRESENCE          mandatory
    }
}

DL-ReferencePowerInformationItem-DL-PC-Rqst ::= SEQUENCE {
    rL-ID          RL-ID,
    dl-ReferencePower          DL-Power,
    iE-Extensions          ProtocolExtensionContainer { { DL-ReferencePowerInformationItem-DL-PC-Rqst-ExtIEs } }    OPTIONAL,
    ...
}

DL-ReferencePowerInformationItem-DL-PC-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DL POWER TIMESLOT CONTROL REQUEST TDD
--
-- *****

```

```

DL-PowerTimeslotControlRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DL-PowerTimeslotControlRequest-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{DL-PowerTimeslotControlRequest-Extensions}}    OPTIONAL,
    ...
}

DL-PowerTimeslotControlRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY ignore          TYPE      NodeB-CommunicationContextID          PRESENCE mandatory
    } |
    { ID id-TimeslotISCPInfo          CRITICALITY ignore          TYPE      DL-TimeslotISCPInfo          PRESENCE mandatory },
    ...
}

DL-PowerTimeslotControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DEDICATED MEASUREMENT INITIATION REQUEST
--
-- *****

DedicatedMeasurementInitiationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementInitiationRequest-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{DedicatedMeasurementInitiationRequest-Extensions}}    OPTIONAL,
    ...
}

DedicatedMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY reject          TYPE      NodeB-CommunicationContextID          PRESENCE
    mandatory } |
    { ID id-MeasurementID          CRITICALITY reject          TYPE      MeasurementID          PRESENCE mandatory
    } |
    { ID id-DedicatedMeasurementObjectType-DM-Rqst          CRITICALITY reject          TYPE      DedicatedMeasurementObjectType-DM-Rqst          PRESENCE
    mandatory } |
    -- This IE represents both the Dedicated Measurement Object Type IE and the choice based on the Dedicated Measurement Object Type
    -- as described in the tabular message format in subclause 9.1.
    { ID id-DedicatedMeasurementType          CRITICALITY reject          TYPE      DedicatedMeasurementType          PRESENCE
    mandatory } |
    { ID id-MeasurementFilterCoefficient          CRITICALITY reject          TYPE      MeasurementFilterCoefficient          PRESENCE
    optional } |
    { ID id-ReportCharacteristics          CRITICALITY reject          TYPE      ReportCharacteristics          PRESENCE
    mandatory } |
    { ID id-CFNReportingIndicator          CRITICALITY reject          TYPE      CFNReportingIndicator          PRESENCE
    mandatory } |
    { ID id-CFN          CRITICALITY reject          TYPE      CFN          PRESENCE
    optional } ,
    ...
}

```

```

DedicatedMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementObjectType-DM-Rqst ::= CHOICE {
    rL                RL-DM-Rqst,
    rLS               RL-Set-DM-Rqst, -- for FDD only
    all-RL            AllRL-DM-Rqst,
    all-RLS           AllRL-Set-DM-Rqst, -- for FDD only
    ...
}

RL-DM-Rqst ::= SEQUENCE {
    rL-InformationList      RL-InformationList-DM-Rqst,
    iE-Extensions           ProtocolExtensionContainer { { RLItem-DM-Rqst-ExtIEs } } OPTIONAL,
    ...
}

RLItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rqst }}

RL-InformationItemIE-DM-Rqst NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rqst CRITICALITY reject TYPE RL-InformationItem-DM-Rqst PRESENCE mandatory }
}

RL-InformationItem-DM-Rqst ::= SEQUENCE {
    rL-ID                RL-ID,
    dPCH-ID              DPCH-ID OPTIONAL, -- for TDD only
    iE-Extensions        ProtocolExtensionContainer { { RL-InformationItem-DM-Rqst-ExtIEs } } OPTIONAL,
    ...
}

RL-InformationItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-DM-Rqst ::= SEQUENCE {
    rL-Set-InformationList-DM-Rqst      RL-Set-InformationList-DM-Rqst,
    iE-Extensions                       ProtocolExtensionContainer { { RL-SetItem-DM-Rqst-ExtIEs } } OPTIONAL,
    ...
}

RL-SetItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-DM-Rqst ::= SEQUENCE (SIZE(1..maxNrOfRLSets)) OF RL-Set-InformationItem-DM-Rqst

RL-Set-InformationItem-DM-Rqst ::= SEQUENCE {
    rL-Set-ID                RL-Set-ID,

```

```

    iE-Extensions          ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rqst-ExtIEs } } OPTIONAL,
    ...
}

RL-Set-InformationItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AllRL-DM-Rqst ::= NULL

AllRL-Set-DM-Rqst ::= NULL

-- *****
--
-- DEDICATED MEASUREMENT INITIATION RESPONSE
--
-- *****

DedicatedMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementInitiationResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DedicatedMeasurementInitiationResponse-Extensions}} OPTIONAL,
    ...
}

DedicatedMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID          CRITICALITY    ignore    TYPE    CRNC-CommunicationContextID          PRESENCE
      mandatory } |
    { ID    id-MeasurementID                        CRITICALITY    ignore    TYPE    MeasurementID                          PRESENCE mandatory
      } |
    { ID    id-DedicatedMeasurementObjectType-DM-Rsp  CRITICALITY    ignore    TYPE    DedicatedMeasurementObjectType-DM-Rsp  PRESENCE
      optional } |
    { ID    id-CriticalityDiagnostics                CRITICALITY    ignore    TYPE    CriticalityDiagnostics                  PRESENCE
      optional },
    ...
}

DedicatedMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
    rL                    RL-DM-Rsp,
    rLS                   RL-Set-DM-Rsp, -- for FDD only
    all-RL                RL-DM-Rsp,
    all-RLS               RL-Set-DM-Rsp, -- for FDD only
    ...
}

RL-DM-Rsp ::= SEQUENCE {
    rL-InformationList-DM-Rsp          RL-InformationList-DM-Rsp,
    iE-Extensions                      ProtocolExtensionContainer { { RLItem-DM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

```

```

}

RLItem-DM-Rsp-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rsp }}

RL-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rsp  CRITICALITY ignore  TYPE RL-InformationItem-DM-Rsp  PRESENCE mandatory }
}

RL-InformationItem-DM-Rsp ::= SEQUENCE {
    rL-ID                RL-ID,
    dPCH-ID              DPCH-ID                OPTIONAL, -- for FDD only
    dedicatedMeasurementValue  DedicatedMeasurementValue,
    cFN                  CFN                    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { RL-InformationItem-DM-Rsp-ExtIEs } }  OPTIONAL,
    ...
}

RL-InformationItem-DM-Rsp-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-DM-Rsp ::= SEQUENCE {
    rL-Set-InformationList-DM-Rsp  RL-Set-InformationList-DM-Rsp,
    iE-Extensions                  ProtocolExtensionContainer { { RL-SetItem-DM-Rsp-ExtIEs } }  OPTIONAL,
    ...
}

RL-SetItem-DM-Rsp-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rsp }}

RL-Set-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rsp  CRITICALITY ignore  TYPE  RL-Set-InformationItem-DM-Rsp PRESENCE mandatory}
}

RL-Set-InformationItem-DM-Rsp ::= SEQUENCE {
    rL-Set-ID                RL-Set-ID,
    dedicatedMeasurementValue  DedicatedMeasurementValue,
    cFN                      CFN                    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rsp-ExtIEs } }  OPTIONAL,
    ...
}

RL-Set-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

-- *****
--
-- DEDICATED MEASUREMENT INITIATION FAILURE
--
-- *****

DedicatedMeasurementInitiationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementInitiationFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DedicatedMeasurementInitiationFailure-Extensions}}    OPTIONAL,
    ...
}

DedicatedMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID    CRITICALITY    ignore          TYPE    CRNC-CommunicationContextID    PRESENCE mandatory } |
    { ID    id-MeasurementID                  CRITICALITY    ignore          TYPE    MeasurementID                    PRESENCE mandatory } |
    { ID    id-Cause                          CRITICALITY    ignore          TYPE    Cause                            PRESENCE mandatory } |
    { ID    id-CriticalityDiagnostics         CRITICALITY    ignore          TYPE    CriticalityDiagnostics            PRESENCE optional },
    ...
}

DedicatedMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DEDICATED MEASUREMENT REPORT
--
-- *****

DedicatedMeasurementReport ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementReport-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DedicatedMeasurementReport-Extensions}}    OPTIONAL,
    ...
}

DedicatedMeasurementReport-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID    CRITICALITY    ignore          TYPE    CRNC-CommunicationContextID    PRESENCE
    mandatory } |
    { ID    id-MeasurementID                  CRITICALITY    ignore          TYPE    MeasurementID                    PRESENCE
    mandatory } |
    { ID    id-DedicatedMeasurementObjectType-DM-Rprt    CRITICALITY    ignore          TYPE    DedicatedMeasurementObjectType-DM-Rprt    PRESENCE
    mandatory } ,
    ...
}

DedicatedMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementObjectType-DM-Rprt ::= CHOICE {
    rL                      RL-DM-Rprt,
    rLS                     RL-Set-DM-Rprt, -- for FDD only
}

```

```

all-RL          RL-DM-Rprt,
all-RLS        RL-Set-DM-Rprt, -- for FDD only
...
}

RL-DM-Rprt ::= SEQUENCE {
  rL-InformationList-DM-Rprt    RL-InformationList-DM-Rprt,
  iE-Extensions                ProtocolExtensionContainer { { RLItem-DM-Rprt-ExtIEs } } OPTIONAL,
  ...
}

RLItem-DM-Rprt-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rprt }}

RL-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-DM-Rprt  CRITICALITY ignore TYPE RL-InformationItem-DM-Rprt  PRESENCE mandatory }
}

RL-InformationItem-DM-Rprt ::= SEQUENCE {
  rL-ID          RL-ID,
  dPCH-ID        DPCH-ID  OPTIONAL, -- for TDD only
  dedicatedMeasurementValueInformation  DedicatedMeasurementValueInformation,
  iE-Extensions  ProtocolExtensionContainer { { RL-InformationItem-DM-Rprt-ExtIEs } } OPTIONAL,
  ...
}

RL-InformationItem-DM-Rprt-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-DM-Rprt ::= SEQUENCE {
  rL-Set-InformationList-DM-Rprt    RL-Set-InformationList-DM-Rprt,
  iE-Extensions                ProtocolExtensionContainer { { RL-SetItem-DM-Rprt-ExtIEs } } OPTIONAL,
  ...
}

RL-SetItem-DM-Rprt-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rprt }}

RL-Set-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
  { ID id-RL-Set-InformationItem-DM-Rprt  CRITICALITY ignore TYPE RL-Set-InformationItem-DM-Rprt  PRESENCE mandatory }
}

RL-Set-InformationItem-DM-Rprt ::= SEQUENCE {
  rL-Set-ID          RL-Set-ID,
  dedicatedMeasurementValueInformation  DedicatedMeasurementValueInformation,
  iE-Extensions      ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rprt-ExtIEs } } OPTIONAL,
}

```

```

}
...
}
RL-Set-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
-- *****
--
-- DEDICATED MEASUREMENT TERMINATION REQUEST
--
-- *****

DedicatedMeasurementTerminationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementTerminationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DedicatedMeasurementTerminationRequest-Extensions}} OPTIONAL,
    ...
}

DedicatedMeasurementTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-NodeB-CommunicationContextID    CRITICALITY    ignore    TYPE    NodeB-CommunicationContextID    PRESENCE mandatory } |
    { ID    id-MeasurementID                  CRITICALITY    ignore    TYPE    MeasurementID                  PRESENCE mandatory },
    ...
}

DedicatedMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
-- *****
--
-- DEDICATED MEASUREMENT FAILURE INDICATION
--
-- *****

DedicatedMeasurementFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementFailureIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DedicatedMeasurementFailureIndication-Extensions}} OPTIONAL,
    ...
}

DedicatedMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID    CRITICALITY    ignore    TYPE    CRNC-CommunicationContextID    PRESENCE mandatory } |
    { ID    id-MeasurementID                  CRITICALITY    ignore    TYPE    MeasurementID                  PRESENCE mandatory } |
    { ID    id-Cause                          CRITICALITY    ignore    TYPE    Cause                          PRESENCE mandatory },
    ...
}

DedicatedMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
-- *****

```

```

--
-- RADIO LINK FAILURE INDICATION
--
-- *****

RadioLinkFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkFailureIndication-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkFailureIndication-Extensions}} OPTIONAL,
    ...
}

RadioLinkFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID          CRITICALITY  ignore          TYPE      CRNC-CommunicationContextID          PRESENCE
      mandatory } |
    { ID      id-Reporting-Object-RL-FailureInd      CRITICALITY  ignore          TYPE      Reporting-Object-RL-FailureInd          PRESENCE mandatory
    } ,
    ...
}

RadioLinkFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Reporting-Object-RL-FailureInd ::= CHOICE {
    rL              RL-RL-FailureInd,
    rL-Set          RL-Set-RL-FailureInd, --FDD only
    ... ,
    cCTrCH          CCTrCH-RL-FailureInd --TDD only
}

RL-RL-FailureInd ::= SEQUENCE {
    rL-InformationList-RL-FailureInd      RL-InformationList-RL-FailureInd,
    iE-Extensions                        ProtocolExtensionContainer { { RLItem-RL-FailureInd-ExtIEs } } OPTIONAL,
    ...
}

RLItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-FailureInd}}

RL-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
    { ID      id-RL-InformationItem-RL-FailureInd      CRITICALITY  ignore          TYPE      RL-InformationItem-RL-FailureInd          PRESENCE
      mandatory}
}

RL-InformationItem-RL-FailureInd ::= SEQUENCE {
    rL-ID          RL-ID,
    cause          Cause,
    iE-Extensions ProtocolExtensionContainer { { RL-InformationItem-RL-FailureInd-ExtIEs } } OPTIONAL,
    ...
}

```

```

RL-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-RL-FailureInd ::= SEQUENCE {
    rL-Set-InformationList-RL-FailureInd          RL-Set-InformationList-RL-FailureInd,
    iE-Extensions                                ProtocolExtensionContainer { { RL-SetItem-RL-FailureInd-ExtIEs } }    OPTIONAL,
    ...
}

RL-SetItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-
FailureInd }}

RL-Set-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-RL-FailureInd    CRITICALITY ignore          TYPE RL-Set-InformationItem-RL-FailureInd    PRESENCE mandatory }
}

RL-Set-InformationItem-RL-FailureInd ::= SEQUENCE {
    rL-Set-ID          RL-Set-ID,
    cause              Cause,
    iE-Extensions     ProtocolExtensionContainer { { RL-Set-InformationItem-RL-FailureInd-ExtIEs } } OPTIONAL,
    ...
}

RL-Set-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCTrCH-RL-FailureInd ::= SEQUENCE {
    rL-ID          RL-ID,
    cCTrCH-InformationList-RL-FailureInd          CCTrCH-InformationList-RL-FailureInd,
    iE-Extensions                                ProtocolExtensionContainer { { CCTrCHItem-RL-FailureInd-ExtIEs } }    OPTIONAL,
    ...
}

CCTrCHItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCTrCH-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-
FailureInd}}

CCTrCH-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
    { ID      id-CCTrCH-InformationItem-RL-FailureInd    CRITICALITY    ignore          TYPE CCTrCH-InformationItem-RL-FailureInd
    PRESENCE    mandatory}
}

CCTrCH-InformationItem-RL-FailureInd ::= SEQUENCE {

```

```

cCtRCH-ID          CCTrCH-ID,
cause              Cause,
iE-Extensions     ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-FailureInd-ExtIEs } } OPTIONAL,
...
}

CCTrCH-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- RADIO LINK PREEMPTION REQUIRED INDICATION
--
-- *****

RadioLinkPreemptionRequiredIndication ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkPreemptionRequiredIndication-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkPreemptionRequiredIndication-Extensions}} OPTIONAL,
  ...
}

RadioLinkPreemptionRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE CRNC-CommunicationContextID          PRESENCE
  mandatory } |
  { ID id-RL-InformationList-RL-PreemptRequiredInd          CRITICALITY ignore          TYPE RL-InformationList-RL-PreemptRequiredInd          PRESENCE optional },
  ...
}

RadioLinkPreemptionRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

RL-InformationList-RL-PreemptRequiredInd          ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIE-RL-PreemptRequiredInd}}

RL-InformationItemIE-RL-PreemptRequiredInd NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-RL-PreemptRequiredInd          CRITICALITY ignore          TYPE RL-InformationItem-RL-PreemptRequiredInd          PRESENCE mandatory
  },
  ...
}

RL-InformationItem-RL-PreemptRequiredInd ::= SEQUENCE {
  rL-ID          RL-ID,
  iE-Extensions ProtocolExtensionContainer { {RL-InformationItem-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationItem-RL-PreemptRequiredInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****

```

```

--
-- RADIO LINK RESTORE INDICATION
--
-- *****

RadioLinkRestoreIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkRestoreIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkRestoreIndication-Extensions}} OPTIONAL,
    ...
}

RadioLinkRestoreIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID          CRITICALITY   ignore          TYPE      CRNC-CommunicationContextID          PRESENCE
      mandatory } |
    { ID      id-Reporting-Object-RL-RestoreInd      CRITICALITY   ignore          TYPE      Reporting-Object-RL-RestoreInd          PRESENCE mandatory
    },
    ...
}

RadioLinkRestoreIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Reporting-Object-RL-RestoreInd ::= CHOICE {
    rL                      RL-RL-RestoreInd,
    rL-Set                  RL-Set-RL-RestoreInd, --FDD only
    ...,
    cCTrCH                  CCTrCH-RL-RestoreInd --TDD only
}

RL-RL-RestoreInd ::= SEQUENCE {
    rL-InformationList-RL-RestoreInd      RL-InformationList-RL-RestoreInd,
    iE-Extensions                          ProtocolExtensionContainer { { RLItem-RL-RestoreInd-ExtIEs } } OPTIONAL,
    ...
}

RLItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationItemIE-RL-RestoreInd}}

RL-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
    { ID      id-RL-InformationItem-RL-RestoreInd      CRITICALITY   ignore          TYPE      RL-InformationItem-RL-RestoreInd          PRESENCE
      mandatory}
}

RL-InformationItem-RL-RestoreInd ::= SEQUENCE {
    rL-ID                      RL-ID,
    iE-Extensions              ProtocolExtensionContainer { { RL-InformationItem-RL-RestoreInd-ExtIEs } } OPTIONAL,
    ...
}

```

```

RL-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-RL-RestoreInd ::= SEQUENCE {
    rL-Set-InformationList-RL-RestoreInd    RL-Set-InformationList-RL-RestoreInd,
    iE-Extensions                          ProtocolExtensionContainer { { RL-SetItem-RL-RestoreInd-ExtIEs } } OPTIONAL,
    ...
}

RL-SetItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-RestoreInd }}

RL-Set-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-RL-RestoreInd    CRITICALITY ignore          TYPE RL-Set-InformationItem-RL-RestoreInd PRESENCE mandatory }
}

RL-Set-InformationItem-RL-RestoreInd ::= SEQUENCE {
    rL-Set-ID                RL-Set-ID,
    iE-Extensions            ProtocolExtensionContainer { { RL-Set-InformationItem-RL-RestoreInd-ExtIEs } } OPTIONAL,
    ...
}

RL-Set-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCTrCH-RL-RestoreInd ::= SEQUENCE {
    rL-ID                    RL-ID,
    cCTrCH-InformationList-RL-RestoreInd    CCTrCH-InformationList-RL-RestoreInd,
    iE-Extensions            ProtocolExtensionContainer { { CCTrCHItem-RL-RestoreInd-ExtIEs } } OPTIONAL,
    ...
}

CCTrCHItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCTrCH-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-RestoreInd }}

CCTrCH-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
    { ID id-CCTrCH-InformationItem-RL-RestoreInd    CRITICALITY ignore          TYPE CCTrCH-InformationItem-RL-RestoreInd PRESENCE mandatory }
}

CCTrCH-InformationItem-RL-RestoreInd ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-RestoreInd-ExtIEs } } OPTIONAL,
}

```



```

}
...
}
CCTrCH-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
-- *****
--
-- COMPRESSED MODE COMMAND FDD
--
-- *****

CompressedModeCommand ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CompressedModeCommand-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CompressedModeCommand-Extensions}}          OPTIONAL,
    ...
}

CompressedModeCommand-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-NodeB-CommunicationContextID      CRITICALITY      ignore      TYPE      NodeB-CommunicationContextID      PRESENCE
      mandatory } |
    { ID      id-Active-Pattern-Sequence-Information CRITICALITY      ignore      TYPE      Active-Pattern-Sequence-Information PRESENCE
      mandatory },
    ...
}

CompressedModeCommand-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- ERROR INDICATION
--
-- *****

ErrorIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{ErrorIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{ErrorIndication-Extensions}}          OPTIONAL,
    ...
}

ErrorIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID      CRITICALITY      ignore      TYPE      CRNC-CommunicationContextID      PRESENCE optional } |
    { ID      id-NodeB-CommunicationContextID      CRITICALITY      ignore      TYPE      NodeB-CommunicationContextID      PRESENCE optional } |
    { ID      id-Cause                             CRITICALITY      ignore      TYPE      Cause                             PRESENCE optional } |
    { ID      id-CriticalityDiagnostics            CRITICALITY      ignore      TYPE      CriticalityDiagnostics            PRESENCE optional },
    ...
}

ErrorIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
-- *****
--
-- PRIVATE MESSAGE
--
-- *****

PrivateMessage ::= SEQUENCE {
    privateIEs      PrivateIE-Container {{PrivateMessage-IEs}},
    ...
}

PrivateMessage-IEs NBAP-PRIVATE-IES ::= {
    ...
}

-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****

PhysicalSharedChannelReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs      ProtocolIE-Container {{PhysicalSharedChannelReconfigurationRequestTDD-IEs}},
    protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestTDD-Extensions}} OPTIONAL,
    ...
}

PhysicalSharedChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY reject          TYPE C-ID          PRESENCE
    mandatory } |
    { ID id-SFN          CRITICALITY reject          TYPE SFN          PRESENCE
    optional } |
    { ID id-PDSCHSets-AddList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-AddList-PSCH-ReconfRqst PRESENCE
    optional } |
    { ID id-PDSCHSets-ModifyList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-ModifyList-PSCH-ReconfRqst PRESENCE
    optional } |
    { ID id-PDSCHSets-DeleteList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-DeleteList-PSCH-ReconfRqst PRESENCE
    optional } |
    { ID id-PUSCHSets-AddList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-AddList-PSCH-ReconfRqst PRESENCE
    optional } |
    { ID id-PUSCHSets-ModifyList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-ModifyList-PSCH-ReconfRqst PRESENCE
    optional } |
    { ID id-PUSCHSets-DeleteList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-DeleteList-PSCH-ReconfRqst PRESENCE
    optional },
    ...
}

PhysicalSharedChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

PDSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-AddItem-PSCH-ReconfRqst

PDSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID                PDSCHSet-ID,
    pDSCH-InformationList      PDSCH-Information-AddList-PSCH-ReconfRqst,
    iE-Extensions              ProtocolExtensionContainer { {PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-AddListIEs-PSCH-ReconfRqst }}

PDSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE
    mandatory}
}

PDSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod           RepetitionPeriod,
    repetitionLength           RepetitionLength,
    tdd-PhysicalChannelOffset  TDD-PhysicalChannelOffset,
    dL-Timeslot-InformationAddList-PSCH-ReconfRqst DL-Timeslot-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions              ProtocolExtensionContainer { {PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSS)) OF DL-Timeslot-InformationAddItem-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                   TimeSlot,
    midambleShiftAndBurstType  MidambleShiftAndBurstType,
    tFCI-Presence              TFCI-Presence,
    dL-Code-InformationAddList-PSCH-ReconfRqst DL-Code-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions              ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSS)) OF DL-Code-InformationAddItem-PSCH-ReconfRqst

DL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                   PDSCH-ID,

```

```

    tdd-ChannelisationCode          TDD-ChannelisationCode,
    iE-Extensions                    ProtocolExtensionContainer { { DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-ModifyItem-PSCH-ReconfRqst

PDSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID                      PDSCHSet-ID,
    pDSCH-InformationList             PDSCH-Information-ModifyList-PSCH-ReconfRqst,
    iE-Extensions                    ProtocolExtensionContainer { {PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst } }

PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE mandatory}
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                  RepetitionPeriod OPTIONAL,
    repetitionLength                  RepetitionLength OPTIONAL,
    tdd-PhysicalChannelOffset         TDD-PhysicalChannelOffset OPTIONAL,
    dL-Timeslot-InformationModifyList-PSCH-ReconfRqst DL-Timeslot-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { {PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                          TimeSlot,
    midambleShiftAndBurstType         MidambleShiftAndBurstType OPTIONAL,
    tFCI-Presence                     TFCI-Presence OPTIONAL,
    dL-Code-InformationModifyList-PSCH-ReconfRqst DL-Code-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

```

```

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                PDSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions           ProtocolExtensionContainer { { DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-DeleteItem-PSCH-ReconfRqst

PDSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID            PDSCHSet-ID,
    iE-Extensions          ProtocolExtensionContainer { { PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-AddItem-PSCH-ReconfRqst

PUSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID            PUSCHSet-ID,
    pUSCH-InformationList  PUSCH-Information-AddList-PSCH-ReconfRqst,
    iE-Extensions          ProtocolExtensionContainer { { PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PUSCH-Information-AddListIEs-PSCH-ReconfRqst } }

PUSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE
    mandatory}
}

PUSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,

```

```

    UL-Timeslot-InformationAddList-PSCH-ReconfRqst          UL-Timeslot-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions                                          ProtocolExtensionContainer { {PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
  }

PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-PSCH-ReconfRqst

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlot                TimeSlot,
  midambleShiftAndBurstType  MidambleShiftAndBurstType,
  tFCI-Presence            TFCI-Presence,
  uL-Code-InformationAddList-PSCH-ReconfRqst  UL-Code-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions            ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
  ...
}

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF UL-Code-InformationAddItem-PSCH-ReconfRqst

UL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  pUSCH-ID                PUSCH-ID,
  tdd-ChannelisationCode  TDD-ChannelisationCode,
  iE-Extensions            ProtocolExtensionContainer { { UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
  ...
}

UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PUSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-ModifyItem-PSCH-ReconfRqst

PUSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  pUSCHSet-ID                PUSCHSet-ID,
  pUSCH-InformationList      PUSCH-Information-ModifyList-PSCH-ReconfRqst,
  iE-Extensions            ProtocolExtensionContainer { {PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
  ...
}

PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PUSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}

PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst  NBAP-PROTOCOL-IES ::= {

```

```

    {ID id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE mandatory}
}

PUSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod RepetitionPeriod OPTIONAL,
    repetitionLength RepetitionLength OPTIONAL,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
    uL-Timeslot-InformationModifyList-PSCH-ReconfRqst UL-Timeslot-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
    tFCI-Presence TFCI-Presence OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst UL-Code-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID PUSCH-ID,
    tdd-ChannelisationCode TDD-ChannelisationCode,
    iE-Extensions ProtocolExtensionContainer { { UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-DeleteItem-PSCH-ReconfRqst

PUSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID PUSCHSet-ID,
    iE-Extensions ProtocolExtensionContainer { {PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

```

```

PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE TDD
--
-- *****

PhysicalSharedChannelReconfigurationResponseTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{PhysicalSharedChannelReconfigurationResponseTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationResponseTDD-Extensions}}
    ...
}

PhysicalSharedChannelReconfigurationResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics      CRITICALITY ignore      TYPE      CriticalityDiagnostics      PRESENCE optional },
    ...
}

PhysicalSharedChannelReconfigurationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE TDD
--
-- *****

PhysicalSharedChannelReconfigurationFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{PhysicalSharedChannelReconfigurationFailureTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationFailureTDD-Extensions}}
    ...
}

PhysicalSharedChannelReconfigurationFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CauseLevel-PSCH-ReconfFailureTDD      CRITICALITY ignore      TYPE CauseLevel-PSCH-ReconfFailureTDD      PRESENCE mandatory },
    { ID      id-CriticalityDiagnostics      CRITICALITY ignore      TYPE      CriticalityDiagnostics      PRESENCE optional },
    ...
}

PhysicalSharedChannelReconfigurationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CauseLevel-PSCH-ReconfFailureTDD ::= CHOICE {
    generalCause          GeneralCauseList-PSCH-ReconfFailureTDD,
    setSpecificCause      SetSpecificCauseList-PSCH-ReconfFailureTDD,
    ...
}

```



```

GeneralCauseList-PSCH-ReconfFailureTDD ::= SEQUENCE {
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { { GeneralCauseItem-PSCH-ReconfFailureTDD-ExtIEs} }    OPTIONAL,
    ...
}

GeneralCauseItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SetSpecificCauseList-PSCH-ReconfFailureTDD ::= SEQUENCE {
    unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD    Unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD    OPTIONAL,
    unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD    Unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { SetSpecificCauseItem-PSCH-ReconfFailureTDD-ExtIEs} }    OPTIONAL,
    ...
}

SetSpecificCauseItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxNrOfPDSCHSets)) OF ProtocolIE-Single-Container {{ Unsuccessful-
PDSCHSetItemIE-PSCH-ReconfFailureTDD }}

Unsuccessful-PDSCHSetItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID    id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD    CRITICALITY ignore    TYPE Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDDPRESENCE
mandatory}
}

Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
    pDSCHSet-ID        PDSCHSet-ID,
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { {Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} }    OPTIONAL,
    ...
}

Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxNrOfPUSCHSets)) OF ProtocolIE-Single-Container {{ Unsuccessful-
PUSCHSetItemIE-PSCH-ReconfFailureTDD }}

Unsuccessful-PUSCHSetItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID    id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD    CRITICALITY ignore    TYPE Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDDPRESENCE
mandatory}
}

Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
    pUSCHSet-ID        PUSCHSet-ID,
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { {Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} }    OPTIONAL,

```

```

}
...
}
Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
-- *****
--
-- RESET REQUEST
--
-- *****

ResetRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{ResetRequest-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{ResetRequest-Extensions}}  OPTIONAL,
  ...
}

ResetRequest-IEs NBAP-PROTOCOL-IES ::= {
  {ID id-ResetIndicator      CRITICALITY ignore      TYPE      ResetIndicator      PRESENCE      mandatory},
  ...
}

ResetRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

ResetIndicator ::= CHOICE {
  communicationContext      CommunicationContextList-Reset,
  communicationControlPort  CommunicationControlPortList-Reset,
  nodeB                      NULL,
  ...
}

CommunicationContextList-Reset ::= SEQUENCE {
  communicationContextInfoList-Reset      CommunicationContextInfoList-Reset,
  iE-Extensions                            ProtocolExtensionContainer { {CommunicationContextItem-Reset-ExtIEs} }  OPTIONAL,
  ...
}

CommunicationContextItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CommunicationContextInfoList-Reset ::= SEQUENCE (SIZE (1.. maxCommunicationContext))  OF ProtocolIE-Single-Container
{{ CommunicationContextInfoItemIE-Reset }}

CommunicationContextInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
  {ID id-CommunicationContextInfoItem-Reset      CRITICALITY reject      TYPE CommunicationContextInfoItem-Reset      PRESENCE mandatory}
}

CommunicationContextInfoItem-Reset ::= SEQUENCE {

```

```

communicationContextType-Reset      CommunicationContextType-Reset,
iE-Extensions                        ProtocolExtensionContainer { { CommunicationContextInfoItem-Reset-ExtIEs} }    OPTIONAL,
...
}

CommunicationContextInfoItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

CommunicationContextType-Reset ::= CHOICE {
cRNC-CommunicationContextID          CRNC-CommunicationContextID,
nodeB-CommunicationContextID         NodeB-CommunicationContextID,
...
}

CommunicationControlPortList-Reset ::= SEQUENCE {
communicationControlPortInfoList-Reset CommunicationControlPortInfoList-Reset,
iE-Extensions                        ProtocolExtensionContainer { {CommunicationControlPortItem-Reset-ExtIEs} }    OPTIONAL,
...
}

CommunicationControlPortItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

CommunicationControlPortInfoList-Reset ::= SEQUENCE (SIZE (1.. maxCCPinNodeB)) OF ProtocolIE-Single-Container {{CommunicationControlPortInfoItemIE-Reset }}

CommunicationControlPortInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
{ID id-CommunicationControlPortInfoItem-Reset      CRITICALITY reject      TYPE CommunicationControlPortInfoItem-Reset      PRESENCE mandatory}
}

CommunicationControlPortInfoItem-Reset ::= SEQUENCE {
communicationControlPortID          CommunicationControlPortID,
iE-Extensions                        ProtocolExtensionContainer { {CommunicationControlPortInfoItem-Reset-ExtIEs} } OPTIONAL,
...
}

CommunicationControlPortInfoItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- RESET RESPONSE
--
-- *****

ResetResponse ::= SEQUENCE {
protocolIEs          ProtocolIE-Container  {{ResetResponse-IEs}},
protocolExtensions  ProtocolExtensionContainer {{ResetResponse-Extensions}}    OPTIONAL,
...
}

```

```

ResetResponse-IEs NBAP-PROTOCOL-IES ::= {
  {ID id-CriticalityDiagnostics      CRITICALITY      ignore      TYPE      CriticalityDiagnostics      PRESENCE optional},
  ...
}

ResetResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

END

```

9.3.4 Information Elements Definitions

```

--*****
--
-- Information Element Definitions
--
--*****

NBAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=
BEGIN

IMPORTS
  maxNrOfTFCS,
  maxNrOfErrors,
  maxCTFC,
  maxNrOfTFs,
  maxTTI-count,
  maxRateMatching,
  maxCodeNrComp-1,
  maxNrOfCodeGroups,
  maxNrOfTFCIGroups,
  maxNrOfTFCI1Combs,
  maxNrOfTFCI2Combs,
  maxNrOfTFCI2Combs-1,
  maxNrOfSF,
  maxTGPS,
  maxNrOfUSCHs,
  maxNrOfULTSs,
  maxNrOfDPCHs,
  maxNrOfCodes,
  maxNrOfDSCHs,
  maxNrOfDLTSS,
  maxNrOfDCHs,
  maxNrOfLevels,

```

```

    id-MessageStructure,
    id-TypeOfError
FROM NBAP-Constants

    Criticality,
    ProcedureID,
    ProtocolIE-ID,
    TransactionID,
    TriggeringMessage
FROM NBAP-CommonDataTypes

    NBAP-PROTOCOL-IES,
    ProtocolExtensionContainer{},
    ProtocolIE-Single-Container{},
    NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers;

-- =====
-- A
-- =====

Acknowledged-PCPCH-access-preambles ::= INTEGER (0..15,...)
-- According to mapping in [22].

Acknowledged-PRACH-preambles-Value ::= INTEGER(0..240,...)
-- According to mapping in [22].The number of L1 acknowledged random access tries per every 20 ms period.

AddorDeleteIndicator ::= ENUMERATED {
    add,
    delete
}

Active-Pattern-Sequence-Information ::= SEQUENCE {
    cmConfigurationChangeCFN                CFN,
    transmission-Gap-Pattern-Sequence-Status  Transmission-Gap-Pattern-Sequence-Status-List  OPTIONAL,
    iE-Extensions                             ProtocolExtensionContainer { {Active-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
    ...
}

Active-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Transmission-Gap-Pattern-Sequence-Status-List ::= SEQUENCE (SIZE (0..maxTGPS)) OF
    SEQUENCE {
        tGPSID          TGPSID,
        tGPRC           TGPRC,
        tGCFN           CFN,
        iE-Extensions  ProtocolExtensionContainer { { Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs } } OPTIONAL,
        ...
    }
}

Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
AICH-Power ::= INTEGER (-22..5)
-- Offset in dB.

AICH-TransmissionTiming ::= ENUMERATED {
    v0,
    v1
}

AllocationRetentionPriority ::= SEQUENCE {
    priorityLevel          PriorityLevel,
    pre-emptionCapability  Pre-emptionCapability,
    pre-emptionVulnerability Pre-emptionVulnerability,
    iE-Extensions         ProtocolExtensionContainer { {AllocationRetentionPriority-ExtIEs} } OPTIONAL,
    ...
}

AllocationRetentionPriority-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

APPreambleSignature ::= INTEGER (0..15)

APSubChannelNumber ::= INTEGER (0..11)

AvailabilityStatus ::= ENUMERATED {
    empty,
    in-test,
    failed,
    power-off,
    off-line,
    off-duty,
    dependency,
    degraded,
    not-installed,
    log-full,
    ...
}

-- =====
-- B
-- =====

BCCH-ModificationTime ::= INTEGER (0..511)
-- Time = BCCH-ModificationTime * 8
-- Range 0 to 4088, step 8
-- All SFN values in which MIB may be mapped are allowed

BindingID ::= OCTET STRING (SIZE (1..4, ...))

BetaCD ::= INTEGER (0..15)

```

```
BlockingPriorityIndicator ::= ENUMERATED {
    high,
    normal,
    low,
    ...
}
-- High priority: Block resource immediately.
-- Normal priority: Block resource when idle or upon timer expiry.
-- Low priority: Block resource when idle.

SCTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

-- =====
-- C
-- =====

Cause ::= CHOICE {
    radioNetwork          CauseRadioNetwork,
    transport             CauseTransport,
    protocol              CauseProtocol,
    misc                 CauseMisc,
    ...
}

CauseMisc ::= ENUMERATED {
    control-processing-overload,
    hardware-failure,
    oam-intervention,
    not-enough-user-plane-processing-resources,
    unspecified,
    ...
}

CauseProtocol ::= ENUMERATED {
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified,
    abstract-syntax-error-falsely-constructed-message,
    ...
}

CauseRadioNetwork ::= ENUMERATED {
    unknown-C-ID,
    cell-not-available,
    power-level-not-supported,
    dl-radio-resources-not-available,
```

```

    ul-radio-resources-not-available,
    rl-already-ActivatedOrAlllocated,
    nodeB-Resources-unavailable,
    measurement-not-supported-for-the-object,
    combining-resources-not-available,
    requested-configuration-not-supported,
    synchronisation-failure,
    priority-transport-channel-established,
    sIB-Origination-in-Node-B-not-Supported,
    requested-tx-diversity-mode-not-supported,
    unspecified,
    bCCH-scheduling-error,
    measurement-temporarily-not-available,
    invalid-CM-settings,
    reconfiguration-CFN-not-elapsed,
    number-of-DL-codes-not-supported,
    s-cipch-not-supported,
    combining-not-supported,
    ul-sf-not-supported,
    dl-SF-not-supported,
    common-transport-channel-type-not-supported,
    dedicated-transport-channel-type-not-supported,
    downlink-shared-channel-type-not-supported,
    uplink-shared-channel-type-not-supported,
    cm-not-supported,
    tx-diversity-no-longer-supported,
    unknown-Local-Cell-ID,
    ...,
    number-of-UL-codes-not-supported
}

CauseTransport ::= ENUMERATED {
    transport-resource-unavailable,
    unspecified,
    ...
}

CCTrCH-ID ::= INTEGER (0..15)

CDSubChannelNumbers ::= BIT STRING {
    subCh11(0),
    subCh10(1),
    subCh9(2),
    subCh8(3),
    subCh7(4),
    subCh6(5),
    subCh5(6),
    subCh4(7),
    subCh3(8),
    subCh2(9),
    subCh1(10),
    subCh0(11)
} (SIZE (12))

```



```

CellParameterID ::= INTEGER (0..127,...)

CFN ::= INTEGER (0..255)

Channel-Assignment-Indication ::= ENUMERATED {
    cA-Active,
    cA-Inactive
}

ChipOffset ::= INTEGER (0..38399)
-- Unit Chip

C-ID ::= INTEGER (0..65535)

Closedlooptimingadjustmentmode ::= ENUMERATED {
    adj-1-slot,
    adj-2-slot,
    ...
}

CommonChannelsCapacityConsumptionLaw ::= SEQUENCE (SIZE(1..maxNrOfSF)) OF
SEQUENCE {
    dl-Cost      INTEGER (0..65535),
    ul-Cost      INTEGER (0..65535),
    iE-Extensions ProtocolExtensionContainer { { CommonChannelsCapacityConsumptionLaw-ExtIEs } } OPTIONAL,
    ...
}

CommonChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonMeasurementType ::= ENUMERATED {
    received-total-wide-band-power,
    transmitted-carrier-power,
    acknowledged-prach-preambles,
    ul-timeslot-iscp,
    acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles,
    ...
}

CommonMeasurementValue ::= CHOICE {
    transmitted-carrier-power      Transmitted-Carrier-Power-Value,
    received-total-wide-band-power Received-total-wide-band-power-Value,
    acknowledged-prach-preambles   Acknowledged-PRACH-preambles-Value,
    ul-TimeslotISCP                 UL-TimeslotISCP-Value,
    acknowledged-PCPCH-access-preambles Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles Detected-PCPCH-access-preambles,
    ...
}

```

```

CommonMeasurementValueInformation ::= CHOICE {
    measurementAvailable      CommonMeasurementAvailable,
    measurementnotAvailable   CommonMeasurementnotAvailable
}

CommonMeasurementAvailable ::= SEQUENCE {
    commonmeasurementValue    CommonMeasurementValue,
    ie-Extensions             ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs } }    OPTIONAL,
    ...
}

CommonMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonMeasurementnotAvailable ::= NULL

CommonPhysicalChannelID ::= INTEGER (0..255)

Common-PhysicalChannel-Status-Information ::= SEQUENCE {
    commonPhysicalChannelID    CommonPhysicalChannelID,
    resourceOperationalState    ResourceOperationalState,
    availabilityStatus          AvailabilityStatus,
    iE-Extensions              ProtocolExtensionContainer { { Common-PhysicalChannel-Status-Information-ExtIEs } }    OPTIONAL,
    ...
}

Common-PhysicalChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonTransportChannelID ::= INTEGER (0..255)

CommonTransportChannel-InformationResponse ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    bindingID                   BindingID OPTIONAL,
    transportLayerAddress        TransportLayerAddress OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { CommonTransportChannel-InformationResponse-ExtIEs } }    OPTIONAL,
    ...
}

CommonTransportChannel-InformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Common-TransportChannel-Status-Information ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    resourceOperationalState    ResourceOperationalState,
    availabilityStatus          AvailabilityStatus,
    iE-Extensions              ProtocolExtensionContainer { { Common-TransportChannel-Status-Information-ExtIEs } }    OPTIONAL,
    ...
}

Common-TransportChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
CommunicationControlPortID ::= INTEGER (0..65535)

Compressed-Mode-Deactivation-Flag ::= ENUMERATED {
    deactivate,
    maintain-Active
}
on-deactivate

ConfigurationGenerationID ::= INTEGER (0..255)
-- Value '0' means "No configuration"

ConstantValue ::= INTEGER (-10..10,...)
-- -10 dB - +10 dB
-- unit dB
-- step 1 dB

CPCH-Allowed-Total-Rate ::= ENUMERATED {
    v15,
    v30,
    v60,
    v120,
    v240,
    v480,
    v960,
    v1920,
    v2880,
    v3840,
    v4800,
    v5760,
    ...
}

CPCHScramblingCodeNumber ::= INTEGER (0..79)

CPCH-UL-DPCCH-SlotFormat ::= INTEGER (0..2,...)

CriticalityDiagnostics ::= SEQUENCE {
    procedureID          ProcedureID          OPTIONAL,
    triggeringMessage    TriggeringMessage    OPTIONAL,
    procedureCriticality Criticality          OPTIONAL,
    transactionID        TransactionID        OPTIONAL,
    iEsCriticalityDiagnostics CriticalityDiagnostics-IE-List OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} } OPTIONAL,
    ...
}

CriticalityDiagnostics-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
  SEQUENCE {
    iECriticality      Criticality,
    iE-ID              ProtocolIE-ID,
    repetitionNumber  RepetitionNumber0      OPTIONAL,
    iE-Extensions     ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} }  OPTIONAL,
    ...
  }

CriticalityDiagnostics-IE-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-MessageStructure      CRITICALITY ignore      EXTENSION MessageStructure      PRESENCE optional } |
  { ID id-TypeOfError           CRITICALITY ignore      EXTENSION TypeOfError           PRESENCE mandatory } ,
  ...
}

MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
  SEQUENCE {
    iE-ID              ProtocolIE-ID,
    repetitionNumber1  RepetitionNumber1      OPTIONAL,
    iE-Extensions     ProtocolExtensionContainer { {MessageStructure-ExtIEs} }  OPTIONAL,
    ...
  }

MessageStructure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CRNC-CommunicationContextID ::= INTEGER (0..1048575)

-- =====
-- D
-- =====

DCH-ID ::= INTEGER (0..255)

DCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-FDD-InformationItem

DCH-FDD-InformationItem ::= SEQUENCE {
  payloadCRC-PresenceIndicator  PayloadCRC-PresenceIndicator,
  ul-FP-Mode                    UL-FP-Mode,
  toAWS                          ToAWS,
  toAWE                          ToAWE,
  dch-SpecificInformationList    DCH-Specific-FDD-InformationList,
  iE-Extensions                  ProtocolExtensionContainer { { DCH-FDD-InformationItem-ExtIEs } }  OPTIONAL,
  ...
}

DCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-Specific-FDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-FDD-Item

```

```

DCH-Specific-FDD-Item ::= SEQUENCE {
    dCH-ID                DCH-ID,
    ul-TransportFormatSet TransportFormatSet,
    dl-TransportFormatSet TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority  FrameHandlingPriority,
    qE-Selector           QE-Selector,
    iE-Extensions         ProtocolExtensionContainer { { DCH-Specific-FDD-Item-ExtIEs} } OPTIONAL,
    ...
}

DCH-Specific-FDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem

DCH-InformationResponseItem ::= SEQUENCE {
    dCH-ID                DCH-ID,
    bindingID             BindingID OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { DCH-InformationResponseItem-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-TDD-InformationItem

DCH-TDD-InformationItem ::= SEQUENCE {
    payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
    ul-FP-Mode                   UL-FP-Mode,
    toAWS                        ToAWS,
    toAWE                        ToAWE,
    dCH-SpecificInformationList  DCH-Specific-TDD-InformationList,
    iE-Extensions               ProtocolExtensionContainer { { DCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

DCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-Specific-TDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-TDD-Item

DCH-Specific-TDD-Item ::= SEQUENCE {
    dCH-ID                DCH-ID,
    ul-CCTrCH-ID         CCTrCH-ID,
    dl-CCTrCH-ID         CCTrCH-ID,
    ul-TransportFormatSet TransportFormatSet,

```

```

dl-TransportFormatSet      TransportFormatSet,
allocationRetentionPriority AllocationRetentionPriority,
frameHandlingPriority      FrameHandlingPriority,
qE-Selector                QE-Selector                OPTIONAL,
-- This IE shall be present if this DCH is part of a set of Coordinated DCHs
iE-Extensions              ProtocolExtensionContainer { { DCH-Specific-TDD-Item-ExtIEs } } OPTIONAL,
...
}

DCH-Specific-TDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

FDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifyItem

FDD-DCHs-to-ModifyItem ::= SEQUENCE {
ul-FP-Mode                UL-FP-Mode                OPTIONAL,
toAWS                     ToAWS                OPTIONAL,
toAWE                     ToAWE                OPTIONAL,
transportBearerRequestIndicator TransportBearerRequestIndicator,
dCH-SpecificInformationList DCH-ModifySpecificInformation-FDD,
iE-Extensions              ProtocolExtensionContainer { { FDD-DCHs-to-ModifyItem-ExtIEs } } OPTIONAL,
...
}

FDD-DCHs-to-ModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DCH-ModifySpecificInformation-FDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-FDD

DCH-ModifySpecificItem-FDD ::= SEQUENCE {
dCH-ID                    DCH-ID,
ul-TransportFormatSet     TransportFormatSet     OPTIONAL,
dl-TransportFormatSet     TransportFormatSet     OPTIONAL,
allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
frameHandlingPriority      FrameHandlingPriority  OPTIONAL,
iE-Extensions              ProtocolExtensionContainer { { DCH-ModifySpecificItem-FDD-ExtIEs } } OPTIONAL,
...
}

DCH-ModifySpecificItem-FDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

TDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifyItem-TDD

DCH-ModifyItem-TDD ::= SEQUENCE {
ul-FP-Mode                UL-FP-Mode                OPTIONAL,
toAWS                     ToAWS                OPTIONAL,
toAWE                     ToAWE                OPTIONAL,
transportBearerRequestIndicator TransportBearerRequestIndicator,

```

```

    dCH-SpecificInformationList      DCH-ModifySpecificInformation-TDD,
    iE-Extensions                    ProtocolExtensionContainer { { TDD-DCHs-to-ModifyItem-ExtIEs } }    OPTIONAL,
    ...
}

TDD-DCHs-to-ModifyItem-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifySpecificInformation-TDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-TDD

DCH-ModifySpecificItem-TDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    ul-CCTrCH-ID                    CCTrCH-ID                    OPTIONAL,
    dl-CCTrCH-ID                    CCTrCH-ID                    OPTIONAL,
    ul-TransportFormatSet           TransportFormatSet           OPTIONAL,
    dl-TransportFormatSet           TransportFormatSet           OPTIONAL,
    allocationRetentionPriority      AllocationRetentionPriority  OPTIONAL,
    frameHandlingPriority            FrameHandlingPriority        OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { DCH-ModifySpecificItem-TDD-ExtIEs } }    OPTIONAL,
    ...
}

DCH-ModifySpecificItem-TDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedChannelsCapacityConsumptionLaw ::= SEQUENCE ( SIZE(1..maxNrOfSF) ) OF
SEQUENCE {
    dl-Cost-1      INTEGER (0..65535),
    dl-Cost-2      INTEGER (0..65535),
    ul-Cost-1      INTEGER (0..65535),
    ul-Cost-2      INTEGER (0..65535),
    iE-Extensions ProtocolExtensionContainer { { DedicatedChannelsCapacityConsumptionLaw-ExtIEs } }    OPTIONAL,
    ...
}

DedicatedChannelsCapacityConsumptionLaw-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementType ::= ENUMERATED {
    sir,
    sir-error,
    transmitted-code-power,
    rscp,
    rx-timing-deviation,
    round-trip-time,
    ...
}

DedicatedMeasurementValue ::= CHOICE {
    SIR-Value          SIR-Value,

```

```

    SIR-ErrorValue          SIR-Error-Value,
    transmittedCodePowerValue  Transmitted-Code-Power-Value,
    rSCP                    RSCP-Value,
    rxTimingDeviationValue  Rx-Timing-Deviation-Value,
    roundTripTime          Round-Trip-Time-Value,
    ...
}

DedicatedMeasurementValueInformation ::= CHOICE {
    measurementAvailable      DedicatedMeasurementAvailable,
    measurementnotAvailable  DedicatedMeasurementnotAvailable
}

DedicatedMeasurementAvailable ::= SEQUENCE {
    dedicatedmeasurementValue  DedicatedMeasurementValue,
    cFN                        CFN OPTIONAL,
    ie-Extensions              ProtocolExtensionContainer { { DedicatedMeasurementAvailableItem-ExtIEs} } OPTIONAL,
    ...
}

DedicatedMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementnotAvailable ::= NULL

Detected-PCPCH-access-preambles ::= INTEGER (0..240,...)
-- According to mapping in [22].

DeltaSIR ::= INTEGER (0..30)
-- Unit dB, Step 0.1 dB, Range 0..3 dB.

DiversityControlField ::= ENUMERATED {
    may,
    must,
    must-not,
    ...
}

DiversityMode ::= ENUMERATED {
    none,
    sTTD,
    closed-loop-mode1,
    closed-loop-mode2,
    ...
}

DL-DPCH-SlotFormat ::= INTEGER (0..16,...)

DL-Timeslot-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationItem

DL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot          TimeSlot,

```



```

midambleShiftAndBurstType      MidambleShiftAndBurstType,
tFCI-Presence                  TFCI-Presence,
dL-Code-Information            TDD-DL-Code-Information,
iE-Extensions                  ProtocolExtensionContainer { { DL-Timeslot-InformationItem-ExtIEs} } OPTIONAL,
...
}

DL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DL-FrameType ::= ENUMERATED {
typeA,
typeB,
...
}

DL-or-Global-CapacityCredit ::= INTEGER (0..65535)

DL-Power ::= INTEGER (-350..150)
-- DL-Power = power * 10
-- If Power <=-35 DL-Power shall be set to -350
-- if Power >=15 DL-Power shall be set to 150
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB

DLPowerAveragingWindowSize ::= INTEGER (1..60)

DL-ScramblingCode ::= INTEGER (0..15)
-- 0= Primary scrambling code of the cell, 1..15= Secondary scrambling code --

DL-TimeslotISCP ::= INTEGER (0..91)

DL-TimeslotISCPInfo ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-TimeslotISCPInfoItem

DL-TimeslotISCPInfoItem ::= SEQUENCE {
timeSlot          TimeSlot,
dL-TimeslotISCP   DL-TimeslotISCP,
iE-Extensions     ProtocolExtensionContainer { {DL-TimeslotISCPInfoItem-ExtIEs} } OPTIONAL,
...
}

DL-TimeslotISCPInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DL-TPC-Pattern01Count ::= INTEGER (0..30,...)

Downlink-Compressed-Mode-Method ::= ENUMERATED {
puncturing,
sFdiv2,
higher-layer-scheduling,
...
}

```

DPCH-ID ::= INTEGER (0..239)

DSCH-ID ::= INTEGER (0..255)

DSCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-InformationResponseItem

```
DSCH-InformationResponseItem ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    bindingID              BindingID                OPTIONAL,
    transportLayerAddress  TransportLayerAddress    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-InformationResponseItem-ExtIEs } } OPTIONAL,
    ...
}
```

```
DSCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

DSCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-FDD-InformationItem

```
DSCH-FDD-InformationItem ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    transportFormatSet     TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority  FrameHandlingPriority,
    toAWS                  ToAWS,
    toAWE                  ToAWE,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-FDD-InformationItem-ExtIEs } } OPTIONAL,
    ...
}
```

```
DSCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

DSCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-TDD-InformationItem

```
DSCH-TDD-InformationItem ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    cCTrCH-ID             CCTrCH-ID,
    transportFormatSet     TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority  FrameHandlingPriority,
    toAWS                  ToAWS,
    toAWE                  ToAWE,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-TDD-InformationItem-ExtIEs } } OPTIONAL,
    ...
}
```

```
DSCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```

-- =====
-- E
-- =====

End-Of-Audit-Sequence-Indicator ::= ENUMERATED {
    end-of-audit-sequence,
    not-end-of-audit-sequence
}

-- =====
-- F
-- =====

FDD-DL-ChannelisationCodeNumber ::= INTEGER(0.. 511)
-- According to the mapping in [9]. The maximum value is equal to the DL spreading factor -1--

FDD-DL-CodeInformation ::= SEQUENCE (SIZE (1..maxNrOfCodes)) OF FDD-DL-CodeInformationItem

FDD-DL-CodeInformationItem ::= SEQUENCE {
    dl-ScramblingCode                DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
    transmissionGapPatternSequenceCodeInformation  TransmissionGapPatternSequenceCodeInformation OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { FDD-DL-CodeInformationItem-ExtIEs } } OPTIONAL,
    ...
}

FDD-DL-CodeInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FDD-S-CCPCH-Offset ::= INTEGER (0..149)
-- 0: 0 chip, 1: 256 chip, 2: 512 chip, .. ,149: 38144 chip [7] --

FDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size0-5,
    step-size1,
    step-size1-5,
    step-size2,
    ...
}

FirstRLS-Indicator ::= ENUMERATED {
    first-RLS,
    not-first-RLS,
    ...
}

FNReportingIndicator ::= ENUMERATED {
    fN-reporting-required,
    fN-reporting-not-required
}

```

```
FrameHandlingPriority ::= INTEGER (0..15)
-- 0=lower priority, 15=higher priority --

FrameOffset ::= INTEGER (0..255)

-- =====
-- G
-- =====

GapLength          ::= INTEGER (1..14)
-- Unit slot

GapDuration        ::= INTEGER (1..144,...)
-- Unit frame

-- =====
-- H
-- =====

-- =====
-- I
-- =====

IB-OC-ID ::= INTEGER (1..16)

IB-SG-DATA ::= BIT STRING
-- Contains SIB data fixed" or "SIB data variable" in segment as encoded in ref.[18].

IB-SG-POS ::= INTEGER (0..4094)
-- Only even positions allowed

IB-SG-REP ::= ENUMERATED {rep4, rep8, rep16, rep32, rep64, rep128, rep256, rep512, rep1024, rep2048, rep4096}

IB-Type ::= ENUMERATED {
    mIB,
    sB1,
    sB2,
    sIB1,
    sIB2,
    sIB3,
    sIB4,
    sIB5,
    sIB6,
    sIB7,
    sIB8,
    sIB9,
    sIB10,
    sIB11,
    sIB12,
    sIB13,
    sIB13dot1,
    sIB13dot2,
    sIB13dot3,
```

```

sIB13dot4,
sIB14,
sIB15,
sIB15dot1,
sIB15dot2,
sIB15dot3,
sIB16,
...,
sIB17,
sIB15dot4,
sIB18
}

```

```

IndicationType ::= ENUMERATED {
noFailure,
serviceImpacting,
...
}

```

```

InnerLoopDLPCStatus ::= ENUMERATED {
active,
inactive
}

```

```

-- =====
-- J
-- =====

-- =====
-- K
-- =====

-- =====
-- L
-- =====

```

```

LimitedPowerIncrease ::= ENUMERATED {
used,
not-used
}

```

```

Local-Cell-ID ::= INTEGER (0..268435455)

```

```

-- =====
-- M
-- =====

```

```

MaximumDL-PowerCapability ::= INTEGER(0..500)
-- Unit dBm, Range 0dBm .. 50dBm, Step +0.1dB

```

```

MaximumTransmissionPower ::= INTEGER(0..500)
-- Unit dBm, Range 0dBm .. 50dBm, Step +0.1dB

```

MaxNrOfUL-DPDCHs ::= INTEGER (1..6)

Max-Number-of-PCPCHes ::= INTEGER (1..64,...)

MaxPRACH-MidambleShifts ::= ENUMERATED {
 shift4,
 shift8,
 ...
}

MeasurementFilterCoefficient ::= ENUMERATED {k0, k1, k2, k3, k4, k5, k6, k7, k8, k9, k11, k13, k15, k17, k19,...}
 -- Measurement Filter Coefficient to be used for measurement

MeasurementID ::= INTEGER (0..1048575)

MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
 SEQUENCE {
 iE-ID ProtocolIE-ID,
 repetitionNumber RepetitionNumber1 OPTIONAL,
 iE-Extensions ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
 ...
 }

MessageStructure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 ...
}

MidambleConfigurationBurstType1And3 ::= ENUMERATED {v4, v8, v16}

MidambleConfigurationBurstType2 ::= ENUMERATED {v3, v6}

MidambleShiftAndBurstType ::= CHOICE {
 type1 SEQUENCE {
 midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
 midambleAllocationMode CHOICE {
 defaultMidamble NULL,
 commonMidamble NULL,
 ueSpecificMidamble MidambleShiftLong,
 ...
 },
 ...
 },
 type2 SEQUENCE {
 midambleConfigurationBurstType2 MidambleConfigurationBurstType2,
 midambleAllocationMode CHOICE {
 defaultMidamble NULL,
 commonMidamble NULL,
 ueSpecificMidamble MidambleShiftShort,
 ...
 },
 ...
 },
}

```

type3 SEQUENCE {
  midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
  midambleAllocationMode CHOICE {
    defaultMidamble NULL,
    ueSpecificMidamble MidambleShiftLong,
    ...
  },
  ...
}

```

```
MidambleShiftLong ::= INTEGER (0..15)
```

```
MidambleShiftShort ::= INTEGER (0..5)
```

```
MinimumDL-PowerCapability ::= INTEGER(0..800)
-- Unit dBm, Range -30dBm .. 50dBm, Step +0.1dB
```

```
MinSpreadingFactor ::= ENUMERATED {
  v4,
  v8,
  v16,
  v32,
  v64,
  v128,
  v256,
  v512
}

```

```
MinUL-ChannelisationCodeLength ::= ENUMERATED {
  v4,
  v8,
  v16,
  v32,
  v64,
  v128,
  v256,
  ...
}

```

```
MultiplexingPosition ::= ENUMERATED {
  fixed,
  flexible
}

```

```

-- =====
-- N
-- =====

```

```
NEOT ::= INTEGER (0..8)
```

```
NFmax ::= INTEGER (1..64,...)
```

N-INSYNC-IND ::= INTEGER (1..256)

N-OUTSYNC-IND ::= INTEGER (1..256)

NodeB-CommunicationContextID ::= INTEGER (0..1048575)

NStartMessage ::= INTEGER (1..8)

```
-- =====
-- 0
-- =====
```

```
-- =====
-- P
-- =====
```

```
PagingIndicatorLength ::= ENUMERATED {
    v2,
    v4,
    v8,
    ...
}
```

```
PayloadCRC-PresenceIndicator ::= ENUMERATED {
    cRC-Included,
    cRC-NotIncluded,
    ...
}
```

```
PCCPCH-Power ::= INTEGER (-150..400,...)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH shall be set to -150
-- If power >= 40 PCCPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
```

```
PCP-Length ::= ENUMERATED{
    v0,
    v8
}
```

```
PDSCH-CodeMapping ::= SEQUENCE {
    dl-ScramblingCode          DL-ScramblingCode,
    signallingMethod          CHOICE {
        code-Range            PDSCH-CodeMapping-PDSCH-CodeMappingInformationList,
        tFCI-Range            PDSCH-CodeMapping-DSCH-MappingInformationList,
        explicit               PDSCH-CodeMapping-PDSCH-CodeInformationList,
        ...,
        replace                PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList
    },
    iE-Extensions             ProtocolExtensionContainer { { PDSCH-CodeMapping-ExtIEs } } OPTIONAL,
    ...
}
```



```
PDSCH-CodeMapping-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
PDSCH-CodeMapping-CodeNumberComp ::= INTEGER (0..maxCodeNrComp-1)
```

```
PDSCH-CodeMapping-SpreadingFactor ::= ENUMERATED {
  v4,
  v8,
  v16,
  v32,
  v64,
  v128,
  v256,
  ...
}
```

```
PDSCH-CodeMapping-PDSCH-CodeMappingInformationList ::= SEQUENCE (SIZE (1..maxNrOfCodeGroups)) OF
SEQUENCE {
  spreadingFactor          PDSCH-CodeMapping-SpreadingFactor,
  multi-CodeInfo          PDSCH-Multi-CodeInfo,
  start-CodeNumber        PDSCH-CodeMapping-CodeNumberComp,
  stop-CodeNumber         PDSCH-CodeMapping-CodeNumberComp,
  iE-Extensions           ProtocolExtensionContainer { { PDSCH-CodeMapping-PDSCH-CodeMappingInformationList-ExtIEs } } OPTIONAL,
  ...
}
```

```
PDSCH-CodeMapping-PDSCH-CodeMappingInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
PDSCH-CodeMapping-DSCH-MappingInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCIGroups)) OF
SEQUENCE {
  maxTFCI-field2-Value    PDSCH-CodeMapping-MaxTFCI-Field2-Value,
  spreadingFactor         PDSCH-CodeMapping-SpreadingFactor,
  multi-CodeInfo          PDSCH-Multi-CodeInfo,
  codeNumber              PDSCH-CodeMapping-CodeNumberComp,
  iE-Extensions           ProtocolExtensionContainer { { PDSCH-CodeMapping-DSCH-MappingInformationList-ExtIEs } } OPTIONAL,
  ...
}
```

```
PDSCH-CodeMapping-DSCH-MappingInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
PDSCH-CodeMapping-MaxTFCI-Field2-Value ::= INTEGER (1..1023)
```

```
PDSCH-CodeMapping-PDSCH-CodeInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
SEQUENCE {
  spreadingFactor          PDSCH-CodeMapping-SpreadingFactor,
  multi-CodeInfo          PDSCH-Multi-CodeInfo,
  codeNumber              PDSCH-CodeMapping-CodeNumberComp,
```

```

    iE-Extensions          ProtocolExtensionContainer { { PDSCH-CodeMapping-PDSCH-CodeInformationList-ExtIEs} } OPTIONAL,
    ...
}

PDSCH-CodeMapping-PDSCH-CodeInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
    SEQUENCE {
        tfci-Field2          TFCS-MaxTFCI-field2-Value,
        spreadingFactor      PDSCH-CodeMapping-SpreadingFactor,
        multi-CodeInfo       PDSCH-Multi-CodeInfo,
        codeNumber           PDSCH-CodeMapping-CodeNumberComp,
        iE-Extensions        ProtocolExtensionContainer { { PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList-ExtIEs} } OPTIONAL,
        ...
    }

PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-Multi-CodeInfo ::= INTEGER (1..16)

PDSCH-ID ::= INTEGER (0..255)

PDSCHSet-ID ::= INTEGER (0..255)

PICH-Mode ::= ENUMERATED {
    v18,
    v36,
    v72,
    v144,
    ...
}

PICH-Power ::= INTEGER (-10..5)
-- Unit dB, Range -10dB .. +5dB, Step +1dB

PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
}

PowerOffset ::= INTEGER (0..24)
-- PowerOffset = offset * 0.25
-- Unit dB, Range 0dB .. +6dB, Step +0.25dB

PowerRaiseLimit ::= INTEGER (0..10)

PRACH-Midamble ::= ENUMERATED {
    inverted,

```

```
    direct,
    ...
}

PreambleSignatures ::= BIT STRING {
    signature15(0),
    signature14(1),
    signature13(2),
    signature12(3),
    signature11(4),
    signature10(5),
    signature9(6),
    signature8(7),
    signature7(8),
    signature6(9),
    signature5(10),
    signature4(11),
    signature3(12),
    signature2(13),
    signature1(14),
    signature0(15)
} (SIZE (16))

PreambleThreshold ::= INTEGER (0..72)
-- 0= -36.0dB, 1= -35.5dB, ... , 72= 0.0dB

Pre-emptionCapability ::= ENUMERATED {
    shall-not-trigger-pre-emption,
    may-trigger-pre-emption
}

Pre-emptionVulnerability ::= ENUMERATED {
    not-pre-emptable,
    pre-emptable
}

PrimaryCPICH-Power ::= INTEGER(-100..500)
-- step 0.1 (Range -10.0..50.0) Unit is dBm

PrimaryScramblingCode ::= INTEGER (0..511)

PriorityLevel          ::= INTEGER (0..15)
-- 0 = spare, 1 = highest priority, ...14 = lowest priority and 15 = no priority

PropagationDelay ::= INTEGER (0..255)
-- Unit: chips, step size 3 chips
-- example: 0 = 0chip, 1 = 3chips

SCH-TimeSlot ::= INTEGER (0..6)

PunctureLimit ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100%
```

```
PUSCH-ID ::= INTEGER (0..255)
```

```
PUSCHSet-ID ::= INTEGER (0..255)
```

```
-- =====  
-- Q  
-- =====
```

```
QE-Selector ::= ENUMERATED {  
    selected,  
    non-selected  
}
```

```
-- =====  
-- R  
-- =====
```

```
RACH-SlotFormat ::= ENUMERATED {  
    v0,  
    v1,  
    v2,  
    v3,  
    ...  
}
```

```
RACH-SubChannelNumbers ::= BIT STRING {  
    subCh11(0),  
    subCh10(1),  
    subCh9(2),  
    subCh8(3),  
    subCh7(4),  
    subCh6(5),  
    subCh5(6),  
    subCh4(7),  
    subCh3(8),  
    subCh2(9),  
    subCh1(10),  
    subCh0(11)  
} (SIZE (12))
```

```
RepetitionLength ::= INTEGER (1..63)
```

```
RepetitionPeriod ::= ENUMERATED {  
    v1,  
    v2,  
    v4,  
    v8,  
    v16,  
    v32,  
    v64,  
    ...  
}
```

RepetitionNumber0 ::= INTEGER (0..255)

RepetitionNumber1 ::= INTEGER (1..256)

RefTFCNumber ::= INTEGER (0..3)

```
ReportCharacteristics ::= CHOICE {
  onDemand          NULL,
  periodic          ReportCharacteristicsType-ReportPeriodicity,
  event-a          ReportCharacteristicsType-EventA,
  event-b          ReportCharacteristicsType-EventB,
  event-c          ReportCharacteristicsType-EventC,
  event-d          ReportCharacteristicsType-EventD,
  event-e          ReportCharacteristicsType-EventE,
  event-f          ReportCharacteristicsType-EventF,
  ...
}
```

```
ReportCharacteristicsType-EventA ::= SEQUENCE {
  measurementThreshold      ReportCharacteristicsType-MeasurementThreshold,
  measurementHysteresisTime ReportCharacteristicsType-ScaledMeasurementHysteresisTime OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { ReportCharacteristicsType-EventA-ExtIEs } } OPTIONAL,
  ...
}
```

```
ReportCharacteristicsType-EventA-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
ReportCharacteristicsType-EventB ::= SEQUENCE {
  measurementThreshold      ReportCharacteristicsType-MeasurementThreshold,
  measurementHysteresisTime ReportCharacteristicsType-ScaledMeasurementHysteresisTime OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { ReportCharacteristicsType-EventB-ExtIEs } } OPTIONAL,
  ...
}
```

```
ReportCharacteristicsType-EventB-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
ReportCharacteristicsType-EventC ::= SEQUENCE {
  measurementIncreaseThreshold ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
  measurementChangeTime       ReportCharacteristicsType-ScaledMeasurementChangeTime,
  iE-Extensions                ProtocolExtensionContainer { { ReportCharacteristicsType-EventC-ExtIEs } } OPTIONAL,
  ...
}
```

```
ReportCharacteristicsType-EventC-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
ReportCharacteristicsType-EventD ::= SEQUENCE {
  measurementDecreaseThreshold ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
```

```

measurementChangeTime      ReportCharacteristicsType-ScaledMeasurementChangeTime,
iE-Extensions              ProtocolExtensionContainer { { ReportCharacteristicsType-EventD-ExtIEs} }  OPTIONAL,
...
}

ReportCharacteristicsType-EventD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

ReportCharacteristicsType-EventE ::= SEQUENCE {
measurementThreshold1      ReportCharacteristicsType-MeasurementThreshold,
measurementThreshold2      ReportCharacteristicsType-MeasurementThreshold          OPTIONAL,
measurementHysteresisTime  ReportCharacteristicsType-ScaledMeasurementHysteresisTime  OPTIONAL,
reportPeriodicity          ReportCharacteristicsType-ReportPeriodicity          OPTIONAL,
iE-Extensions              ProtocolExtensionContainer { { ReportCharacteristicsType-EventE-ExtIEs} }  OPTIONAL,
...
}

ReportCharacteristicsType-EventE-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

ReportCharacteristicsType-EventF ::= SEQUENCE {
measurementThreshold1      ReportCharacteristicsType-MeasurementThreshold,
measurementThreshold2      ReportCharacteristicsType-MeasurementThreshold          OPTIONAL,
measurementHysteresisTime  ReportCharacteristicsType-ScaledMeasurementHysteresisTime  OPTIONAL,
reportPeriodicity          ReportCharacteristicsType-ReportPeriodicity          OPTIONAL,
iE-Extensions              ProtocolExtensionContainer { { ReportCharacteristicsType-EventF-ExtIEs} }  OPTIONAL,
...
}

ReportCharacteristicsType-EventF-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold ::= CHOICE {
received-total-wide-band-power      Received-total-wide-band-power-Value-IncrDecrThres,
transmitted-carrier-power           Transmitted-Carrier-Power-Value,
acknowledged-prach-preambles        Acknowledged-PRACH-preambles-Value,
uL-TimeslotISCP                     UL-TimeslotISCP-Value-IncrDecrThres,
sir                                  SIR-Value-IncrDecrThres,
sir-error                            SIR-Error-Value-IncrDecrThres,
transmitted-code-power              Transmitted-Code-Power-Value-IncrDecrThres,
rscp                                  RSCP-Value-IncrDecrThres,
round-trip-time                     Round-Trip-Time-IncrDecrThres,
acknowledged-PCPCH-access-preambles Acknowledged-PCPCH-access-preambles,
detected-PCPCH-access-preambles     Detected-PCPCH-access-preambles,
...
}

ReportCharacteristicsType-MeasurementThreshold ::= CHOICE {
received-total-wide-band-power      Received-total-wide-band-power-Value,
transmitted-carrier-power           Transmitted-Carrier-Power-Value,

```

```

    acknowledged-prach-preambles      Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP                    UL-TimeslotISCP-Value,
    sir                                 SIR-Value,
    sir-error                           SIR-Error-Value,
    transmitted-code-power              Transmitted-Code-Power-Value,
    rscp                                 RSCP-Value,
    rx-timing-deviation                  Rx-Timing-Deviation-Value,
    round-trip-time                      Round-Trip-Time-Value,
    acknowledged-PCPCH-access-preambles Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles     Detected-PCPCH-access-preambles,
    ...
}

```

```

ReportCharacteristicsType-ScaledMeasurementChangeTime ::= CHOICE {
    msec                MeasurementChangeTime-Scaledmsec,
    ...
}

```

```

MeasurementChangeTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementChangeTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms

```

```

ReportCharacteristicsType-ScaledMeasurementHysteresisTime ::= CHOICE {
    msec                MeasurementHysteresisTime-Scaledmsec,
    ...
}

```

```

MeasurementHysteresisTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementHysteresisTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms

```

```

ReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
    msec                ReportPeriodicity-Scaledmsec,
    min                 ReportPeriodicity-Scaledmin,
    ...
}

```

```

ReportPeriodicity-Scaledmsec ::= INTEGER (1..6000,...)
-- ReportPeriodicity-msec = ReportPeriodicity * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms

```

```

ReportPeriodicity-Scaledmin ::= INTEGER (1..60,...)
-- Unit min, Range 1min .. 60min(hour), Step 1min

```

```

ResourceOperationalState ::= ENUMERATED {
    enabled,
    disabled
}

```

```

CommonTransportChannel-InformationResponse ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    bindingID                     BindingID OPTIONAL,
    transportLayerAddress         TransportLayerAddress OPTIONAL,
}

```

```

    IE-Extensions ProtocolExtensionContainer { { CommonTransportChannel-InformationResponse-ExtIEs } } OPTIONAL,
    ...
}

```

```

CommonTransportChannel-InformationResponse-ExtIEs-NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

LimitedPowerIncrease ::= ENUMERATED {
    used,
    not-used
}

```

RL-ID ::= INTEGER (0..31)

RL-Set-ID ::= INTEGER (0..31)

Round-Trip-Time-IncrDecrThres ::= INTEGER(0..32766)

Round-Trip-Time-Value ::= INTEGER(0..32767)
 -- According to mapping in [22]

RSCP-Value ::= INTEGER (0..127)
 -- According to mapping in [23]

RSCP-Value-IncrDecrThres ::= INTEGER (0..126)

Received-total-wide-band-power-Value ::= INTEGER(0..621)
 -- According to mapping in [22]/[23]

Received-total-wide-band-power-Value-IncrDecrThres ::= INTEGER (0..620)

Rx-Timing-Deviation-Value ::= INTEGER (0..8191)
 -- According to mapping in [23]

```

-- =====
-- S
-- =====

```

AdjustmentPeriod ::= INTEGER(1..256)
 -- Unit Frame

ScaledAdjustmentRatio ::= INTEGER(0..100)
 -- AdjustmentRatio = ScaledAdjustmentRatio / 100

MaxAdjustmentStep ::= INTEGER(1..10)
 -- Unit Slot

ScramblingCodeNumber ::= INTEGER (0..15)

SecondaryCCPCH-SlotFormat ::= INTEGER(0..17,...)

Segment-Type ::= ENUMERATED {


```
    first-segment,
    first-segment-short,
    subsequent-segment,
    last-segment,
    last-segment-short,
    complete-SIB,
    complete-SIB-short,
    ...
}

S-FieldLength ::= ENUMERATED {
    v1,
    v2,
    ...
}

SFN ::= INTEGER (0..4095)

ShutdownTimer ::= INTEGER (1..3600)
-- Unit sec

SIB-Originator ::= ENUMERATED {
    nodeB,
    cRNC,
    ...
}

SIR-Error-Value ::= INTEGER (0..125)
-- According to mapping in [22]

SIR-Error-Value-IncrDecrThres ::= INTEGER (0..124)

SIR-Value ::= INTEGER (0..63)
-- According to mapping in [22]/[23]

SIR-Value-IncrDecrThres ::= INTEGER (0..62)

SpecialBurstScheduling ::= INTEGER (1..256)

SSDT-Cell-Identity ::= ENUMERATED {a, b, c, d, e, f, g, h}

SSDT-CellID-Length ::= ENUMERATED {
    short,
    medium,
    long
}

SSDT-Indication ::= ENUMERATED {
    ssdt-active-in-the-UE,
    ssdt-not-active-in-the-UE
}

Start-Of-Audit-Sequence-Indicator ::= ENUMERATED {
```

```
    start-of-audit-sequence,
    not-start-of-audit-sequence
}

STTD-Indicator ::= ENUMERATED {
    active,
    inactive,
    ...
}

SSDT-SupportIndicator ::= ENUMERATED {
    sSDT-Supported,
    sSDT-not-supported
}

SyncCase ::= INTEGER (1..2,...)

-- =====
-- T
-- =====

T-Cell ::= ENUMERATED {
    v0,
    v1,
    v2,
    v3,
    v4,
    v5,
    v6,
    v7,
    v8,
    v9
}

T-RLFFAILURE ::= INTEGER (0..255)
-- Unit seconds, Range 0s .. 25.5s, Step 0.1s

TDD-ChannelisationCode ::= ENUMERATED {
    chCode1div1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
    chCode4div4,
    chCode8div1,
    chCode8div2,
    chCode8div3,
    chCode8div4,
    chCode8div5,
    chCode8div6,
    chCode8div7,
    chCode8div8,
```

```

    chCode16div1,
    chCode16div2,
    chCode16div3,
    chCode16div4,
    chCode16div5,
    chCode16div6,
    chCode16div7,
    chCode16div8,
    chCode16div9,
    chCode16div10,
    chCode16div11,
    chCode16div12,
    chCode16div13,
    chCode16div14,
    chCode16div15,
    chCode16div16,
    ...
}

TDD-DL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem

TDD-DL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCode TDD-ChannelisationCode,
    iE-Extensions          ProtocolExtensionContainer { { TDD-DL-Code-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

TDD-DL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DPCHOffset ::= CHOICE {
    initialOffset    INTEGER (0..255),
    noinitialOffset  INTEGER (0..63)
}

TDD-PhysicalChannelOffset ::= INTEGER (0..63)

TDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size1,
    step-size2,
    step-size3,
    ...
}

TransportFormatCombination-Beta ::= CHOICE {
    signalledGainFactors SEQUENCE {
        gainFactor CHOICE {
            fdd SEQUENCE {
                betaC BetaCD,
                betaD BetaCD,
            }
            iE-Extensions ProtocolExtensionContainer { { GainFactorFDD-ExtIEs } } OPTIONAL,
        }
    }
}

```

```

        },
        tdd
        BetaCD,
        ...
    },
    refTFCNumber          RefTFCNumber    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { SignalledGainFactors-ExtIEs } } OPTIONAL,
    ...
},
computedGainFactors    RefTFCNumber,
...
}

GainFactorFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SignalledGainFactors-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-UL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationItem

TDD-UL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCode TDD-ChannelisationCode,
    iE-Extensions          ProtocolExtensionContainer { { TDD-UL-Code-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

TDD-UL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI-Coding ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    ...
}

TFCI-Presence ::= ENUMERATED {
    present,
    not-present
}

TFCI-SignallingMode ::= SEQUENCE {
    tFCI-SignallingOption    TFCI-SignallingMode-TFCI-SignallingOption,
    splitType                TFCI-SignallingMode-SplitType            OPTIONAL,
    -- This IE shall be present if the TFCI signalling option is split --
    lengthOfTFCI2            TFCI-SignallingMode-LengthOfTFCI2        OPTIONAL,
    -- This IE shall be present if the split type is logical --
}

```

```

    iE-Extensions          ProtocolExtensionContainer { { TFCI-SignallingMode-ExtIEs} }    OPTIONAL,
    ...
}

TFCI-SignallingMode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI-SignallingMode-LengthOfTFCI2 ::= INTEGER (1..10)

TFCI-SignallingMode-SplitType ::= ENUMERATED {
    hard,
    logical
}

TFCI-SignallingMode-TFCI-SignallingOption ::= ENUMERATED {
    normal,
    split
}

TFCI2-BearerInformationResponse ::= SEQUENCE {
    bindingID                BindingID,
    transportLayerAddress    TransportLayerAddress,
    iE-Extensions            ProtocolExtensionContainer { { TFCI2-BearerInformationResponse-ExtIEs} }    OPTIONAL,
    ...
}

TFCI2-BearerInformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TGD                        ::= INTEGER (0|15..269)
-- 0 = Undefined, only one transmission gap in the transmission gap pattern sequence

TGPRC                      ::= INTEGER (0..511)
-- 0 = infinity

TGPSID                     ::= INTEGER (1.. maxTGPS)

TGSN                       ::= INTEGER (0..14)

TimeSlot ::= INTEGER (0..14)

TimeSlotDirection ::= ENUMERATED {
    ul,
    dl,
    ...
}

TimeSlotStatus ::= ENUMERATED {
    active,
    not-active,
    ...
}

```

```

}

TimingAdvanceApplied ::= ENUMERATED {
    yes,
    no
}

ToAWE ::= INTEGER (0..2559)
-- Unit ms

ToAWS ::= INTEGER (0..1279)
-- Unit ms

Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
SEQUENCE {
    tGPSID          TGPSID,
    tGSN            TGSN,
    tGL1            GapLength,
    tGL2            GapLength OPTIONAL,
    tGD             TGD,
    tGPL1           GapDuration,
    tGPL2           GapDuration OPTIONAL,
    uL-DL-mode      UL-DL-mode,
    downlink-Compressed-Mode-Method Downlink-Compressed-Mode-Method OPTIONAL,
    -- This IE shall be present if the UL/DL mode IE is set to "DL only" or "UL/DL"
    uplink-Compressed-Mode-Method Uplink-Compressed-Mode-Method OPTIONAL,
    -- This IE shall be present if the UL/DL mode IE is set to "UL only" or "UL/DL"
    dL-FrameType    DL-FrameType,
    delta-SIR1       DeltaSIR,
    delta-SIR-after1 DeltaSIR,
    delta-SIR2       DeltaSIR OPTIONAL,
    delta-SIR-after2 DeltaSIR OPTIONAL,
    iE-Extensions    ProtocolExtensionContainer { {Transmission-Gap-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
    ...
}

Transmission-Gap-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransmissionGapPatternSequenceCodeInformation ::= ENUMERATED{
    code-change,
    nocode-change
}

Transmitted-Carrier-Power-Value ::= INTEGER(0..100)
-- According to mapping in [422]/[523]

Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in [422]/[523]

Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)

```

```

TransmissionDiversityApplied ::= BOOLEAN
-- true: applied, false: not applied

TransmitDiversityIndicator ::= ENUMERATED {
    active,
    inactive
}

TFCS ::= SEQUENCE {
    tFCSvalues
        CHOICE {
            no-Split-in-TFCSI          TFCS-TFCSList,
            split-in-TFCSI             SEQUENCE {
                transportFormatCombination-DCH    TFCS-DCHList,
                signallingMethod                  CHOICE {
                    tFCI-Range                    TFCS-MappingOnDSCHList,
                    explicit                       TFCS-DSCHList,
                    ...
                },
                iE-Extensions                ProtocolExtensionContainer { { Split-in-TFCSI-ExtIEs } }    OPTIONAL,
                ...
            },
            ...
        },
    iE-Extensions                ProtocolExtensionContainer { { TFCS-ExtIEs } }    OPTIONAL,
    ...
}

Split-in-TFCSI-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCSs)) OF
    SEQUENCE {
        cTFC                    TFCS-CTFC,
        tFC-Beta                TransportFormatCombination-Beta    OPTIONAL,
        -- The IE shall be present if the TFCS concerns a UL DPCH or PRACH channel [FDD - or PCPCH channel].
        iE-Extensions          ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs } }    OPTIONAL,
        ...
    }

TFCS-TFCSList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-CTFC ::= CHOICE {
    ctfc2bit                    INTEGER (0..3),
    ctfc4bit                    INTEGER (0..15),
    ctfc6bit                    INTEGER (0..63),
    ctfc8bit                    INTEGER (0..255),
}

```

```

ctfc12bit          INTEGER (0..4095),
ctfc16bit          INTEGER (0..65535),
ctfcmaxbit        INTEGER (0..maxCTFC)
}

TFCS-DCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI1Combs)) OF
  SEQUENCE {
    cTFC            TFCS-CTFC,
    iE-Extensions  ProtocolExtensionContainer { { TFCS-DCHList-ExtIEs} } OPTIONAL,
    ...
  }

TFCS-DCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TFCS-MappingOnDSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Groups)) OF
  SEQUENCE {
    maxTFCI-field2-Value  TFCS-MaxTFCI-field2-Value,
    cTFC-DSCH            TFCS-CTFC,
    iE-Extensions        ProtocolExtensionContainer { { TFCS-MappingOnDSCHList-ExtIEs} } OPTIONAL,
    ...
  }

TFCS-MappingOnDSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TFCS-MaxTFCI-field2-Value ::= INTEGER (1..maxNrOfTFCI2Combs-1)

TFCS-DSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
  SEQUENCE {
    cTFC-DSCH          TFCS-CTFC,
    iE-Extensions      ProtocolExtensionContainer { { TFCS-DSCHList-ExtIEs} } OPTIONAL,
    ...
  }

TFCS-DSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TransportBearerRequestIndicator ::= ENUMERATED {
  bearerRequested,
  bearerNotRequested,
  ...
}

TransportFormatSet ::= SEQUENCE {
  dynamicParts          TransportFormatSet-DynamicPartList,
  semi-staticPart      TransportFormatSet-Semi-staticPart,
  iE-Extensions        ProtocolExtensionContainer { { TransportFormatSet-ExtIEs} } OPTIONAL,
  ...
}

```



```

TransportFormatSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
  SEQUENCE {
    nrOfTransportBlocks      TransportFormatSet-NrOfTransportBlocks,
    transportBlockSize      TransportFormatSet-TransportBlockSize      OPTIONAL,
    -- This IE shall be present if the Number of Transport Blocks IE is set to greater than 0
    mode                    TransportFormatSet-ModeDP,
    iE-Extensions          ProtocolExtensionContainer { { TransportFormatSet-DynamicPartList-ExtIEs } } OPTIONAL,
    ...
  }

TransportFormatSet-DynamicPartList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TDD-TransportFormatSet-ModeDP ::= SEQUENCE {
  transmissionTimeIntervalInformation      TransmissionTimeIntervalInformation      OPTIONAL,
  -- This IE shall be present if the Transmission Time Interval IE in the Semi-static Transport Format Information IE is set to "dynamic".
  iE-Extensions          ProtocolExtensionContainer { {TDD-TransportFormatSet-ModeDP-ExtIEs} } OPTIONAL,
  ...
}

TDD-TransportFormatSet-ModeDP-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-count)) OF
  SEQUENCE {
    transmissionTimeInterval      TransportFormatSet-TransmissionTimeIntervalDynamic,
    iE-Extensions          ProtocolExtensionContainer { { TransmissionTimeIntervalInformation-ExtIEs } } OPTIONAL,
    ...
  }

TransmissionTimeIntervalInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TransportFormatSet-Semi-staticPart ::= SEQUENCE {
  transmissionTimeInterval      TransportFormatSet-TransmissionTimeIntervalSemiStatic,
  channelCoding                TransportFormatSet-ChannelCodingType,
  codingRate                    TransportFormatSet-CodingRate      OPTIONAL,
  -- This IE shall be present if the Type of channel coding IE is set to 'convolutional' or 'turbo'
  rateMatchingAttribute        TransportFormatSet-RateMatchingAttribute,
  cRC-Size                      TransportFormatSet-CRC-Size,
  mode                          TransportFormatSet-ModeSSP,
  iE-Extensions          ProtocolExtensionContainer { { TransportFormatSet-Semi-staticPart-ExtIEs } } OPTIONAL,
  ...
}

```

```
TransportFormatSet-Semi-staticPart-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-ChannelCodingType ::= ENUMERATED {
    no-codingTDD,
    convolutional-coding,
    turbo-coding,
    ...
}

TransportFormatSet-CodingRate ::= ENUMERATED {
    half,
    third,
    ...
}

TransportFormatSet-CRC-Size ::= ENUMERATED {
    v0,
    v8,
    v12,
    v16,
    v24,
    ...
}

TransportFormatSet-ModeDP ::= CHOICE {
    tdd                TDD-TransportFormatSet-ModeDP,
    notApplicable      NULL,
    ...
}

TransportFormatSet-ModeSSP ::= CHOICE {
    tdd                TransportFormatSet-SecondInterleavingMode,
    notApplicable      NULL,
    ...
}

TransportFormatSet-NrOfTransportBlocks ::= INTEGER (0..512)

TransportFormatSet-RateMatchingAttribute ::= INTEGER (1..maxRateMatching)

TransportFormatSet-SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeSlot-related,
    ...
}

TransportFormatSet-TransmissionTimeIntervalDynamic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
```

```

}
...
}
TransportFormatSet-TransmissionTimeIntervalSemiStatic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    dynamic,
    ...
}
TransportFormatSet-TransportBlockSize ::= INTEGER (0..5000)
TransportLayerAddress ::= BIT STRING (SIZE (1..160, ...))
TSTD-Indicator ::= ENUMERATED {
    active,
    inactive
}
TypeOfError ::= ENUMERATED {
    not-understood,
    missing,
    ...
}
-- =====
-- U
-- =====
UARFCN ::= INTEGER (0..16383, ...)
-- corresponds to 1885.2MHz .. 2024.8MHz
UL-CapacityCredit ::= INTEGER (0..65535)
UL-DL-mode ::= ENUMERATED {
    ul-only,
    dl-only,
    both-ul-and-dl
}
Uplink-Compressed-Mode-Method ::= ENUMERATED {
    sFdiv2,
    higher-layer-scheduling,
    ...
}
UL-Timeslot-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationItem
UL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot                               TimeSlot,
    midambleShiftAndBurstType             MidambleShiftAndBurstType,

```

```

    tFCI-Presence
    uL-Code-InformationList
    iE-Extensions
    ...
}

UL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCCH-SlotFormat ::= INTEGER (0..5,...)

UL-SIR ::= INTEGER (-82..173)
-- According to mapping in [16]

UL-FP-Mode ::= ENUMERATED {
    normal,
    silent,
    ...
}

UL-PhysCH-SF-Variation ::= ENUMERATED {
    sf-variation-supported,
    sf-variation-not-supported
}

UL-ScramblingCode ::= SEQUENCE {
    uL-ScramblingCodeNumber      UL-ScramblingCodeNumber,
    uL-ScramblingCodeLength      UL-ScramblingCodeLength,
    iE-Extensions                ProtocolExtensionContainer { { UL-ScramblingCode-ExtIEs } } OPTIONAL,
    ...
}

UL-ScramblingCode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-ScramblingCodeNumber ::= INTEGER (0..16777215)

UL-ScramblingCodeLength ::= ENUMERATED {
    short,
    long
}

UL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-TimeSlot-ISCP-InfoItem

UL-TimeSlot-ISCP-InfoItem ::= SEQUENCE {
    timeSlot      TimeSlot,
    iSCP          UL-TimeSlotISCP-Value,
    iE-Extensions ProtocolExtensionContainer { { UL-TimeSlot-ISCP-InfoItem-ExtIEs } } OPTIONAL,
    ...
}

```

```

UL-TimeSlot-ISCP-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-Information ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationItem

USCH-InformationItem ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    cCTrCH-ID              CCTrCH-ID,
    transportFormatSet     TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    iE-Extensions          ProtocolExtensionContainer { { USCH-InformationItem-ExtIEs} }    OPTIONAL,
    ...
}

USCH-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationResponseItem

USCH-InformationResponseItem ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    bindingID              BindingID                OPTIONAL,
    transportLayerAddress  TransportLayerAddress    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { USCH-InformationResponseItem-ExtIEs} }    OPTIONAL,
    ...
}

USCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeslotISCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]

UL-TimeslotISCP-Value-IncrDecrThres ::= INTEGER (0..126)

USCH-ID ::= INTEGER (0..255)

-- =====
-- V
-- =====

-- =====
-- W
-- =====

-- =====
-- X
-- =====

-- =====

```

```
-- Y
-- =====
--
-- =====
-- Z
-- =====

END
```

9.3.5 Common Definitions

```
-- *****
--
-- Common definitions
--
-- *****

NBAP-CommonDataTypes {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-CommonDataTypes (3) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- Extension constants
--
-- *****

maxPrivateIEs                INTEGER ::= 65535
maxProtocolExtensions        INTEGER ::= 65535
maxProtocolIEs               INTEGER ::= 65535

-- *****
--
-- Common Data Types
--
-- *****

Criticality ::= ENUMERATED { reject, ignore, notify }

MessageDiscriminator ::= ENUMERATED { common, dedicated }

Presence ::= ENUMERATED { optional, conditional, mandatory }

PrivateIE-ID ::= CHOICE {
  local          INTEGER (0..maxPrivateIEs),
  global         OBJECT IDENTIFIER
}

}
```

```

ProcedureCode ::= INTEGER (0..255)

ProcedureID ::= SEQUENCE {
    procedureCode ProcedureCode,
    ddMode        ENUMERATED { tdd, fdd, common, ... }
}

ProtocolIE-ID ::= INTEGER (0..maxProtocolIEs)

TransactionID ::= CHOICE {
    shortTransActionId  INTEGER (0..127),
    longTransActionId   INTEGER (0..32767)
}

TriggeringMessage ::= ENUMERATED { initiating-message, successful-outcome, unsuccessful-outcome, outcome }

END

```

9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****

NBAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Constants (4)}

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    ProcedureCode,
    ProtocolIE-ID
FROM NBAP-CommonDataTypes;

-- *****
--
-- Elementary Procedures
--
-- *****

id-audit                ProcedureCode ::= 0
id-auditRequired        ProcedureCode ::= 1
id-blockResource        ProcedureCode ::= 2
id-cellDeletion         ProcedureCode ::= 3
id-cellReconfiguration  ProcedureCode ::= 4

```

id-cellSetup	ProcedureCode ::= 5
id-commonMeasurementFailure	ProcedureCode ::= 6
id-commonMeasurementInitiation	ProcedureCode ::= 7
id-commonMeasurementReport	ProcedureCode ::= 8
id-commonMeasurementTermination	ProcedureCode ::= 9
id-commonTransportChannelDelete	ProcedureCode ::= 10
id-commonTransportChannelReconfigure	ProcedureCode ::= 11
id-commonTransportChannelSetup	ProcedureCode ::= 12
id-compressedModeCommand	ProcedureCode ::= 14
id-dedicatedMeasurementFailure	ProcedureCode ::= 16
id-dedicatedMeasurementInitiation	ProcedureCode ::= 17
id-dedicatedMeasurementReport	ProcedureCode ::= 18
id-dedicatedMeasurementTermination	ProcedureCode ::= 19
id-downlinkPowerControl	ProcedureCode ::= 20
id-downlinkPowerTimeslotControl	ProcedureCode ::= 38
id-errorIndicationForCommon	ProcedureCode ::= 35
id-errorIndicationForDedicated	ProcedureCode ::= 21
id-physicalSharedChannelReconfiguration	ProcedureCode ::= 37
id-privateMessageForCommon	ProcedureCode ::= 36
id-privateMessageForDedicated	ProcedureCode ::= 22
id-radioLinkAddition	ProcedureCode ::= 23
id-radioLinkDeletion	ProcedureCode ::= 24
id-radioLinkFailure	ProcedureCode ::= 25
id-radioLinkPreemption	ProcedureCode ::= 39
id-radioLinkRestoration	ProcedureCode ::= 26
id-radioLinkSetup	ProcedureCode ::= 27
id-reset	ProcedureCode ::= 13
id-resourceStatusIndication	ProcedureCode ::= 28
id-synchronisedRadioLinkReconfigurationCancellation	ProcedureCode ::= 29
id-synchronisedRadioLinkReconfigurationCommit	ProcedureCode ::= 30
id-synchronisedRadioLinkReconfigurationPreparation	ProcedureCode ::= 31
id-systemInformationUpdate	ProcedureCode ::= 32
id-unblockResource	ProcedureCode ::= 33
id-unSynchronisedRadioLinkReconfiguration	ProcedureCode ::= 34

-- *****

--

-- Lists

--

-- *****

maxNrOfCodes	INTEGER ::= 10
maxNrOfDLTSs	INTEGER ::= 15
maxNrOfErrors	INTEGER ::= 256
maxNrOfTFs	INTEGER ::= 32
maxNrOfTFCs	INTEGER ::= 1024
maxNrOfRLs	INTEGER ::= 16
maxNrOfRLs-1	INTEGER ::= 15 -- maxNrOfRLs - 1
maxNrOfRLs-2	INTEGER ::= 14 -- maxNrOfRLs - 2
maxNrOfRLSets	INTEGER ::= maxNrOfRLs
maxNrOfDPCHs	INTEGER ::= 240
maxNrOfSCCPCHs	INTEGER ::= 8
maxNrOfCPCHs	INTEGER ::= 16


```

maxNrOfPCPCHs          INTEGER ::= 64
maxNrOfDCHs            INTEGER ::= 128
maxNrOfDSCHs          INTEGER ::= 32
maxNrOfFACHs          INTEGER ::= 8
maxNrOfCCTrCHs        INTEGER ::= 16
maxNrOfPDSCHs         INTEGER ::= 256
maxNrOfPUSCHs         INTEGER ::= 256
maxNrOfPDSCHSets      INTEGER ::= 256
maxNrOfPUSCHSets      INTEGER ::= 256
maxNrOfULTSs          INTEGER ::= 15
maxNrOfUSCHs          INTEGER ::= 32
maxAPSigNum           INTEGER ::= 16
maxNrOfSlotFormatsPRACH INTEGER ::= 8
maxCellInNodeB        INTEGER ::= 256
maxCCPinNodeB         INTEGER ::= 256
maxCPCHCell           INTEGER ::= maxNrOfCPCHs
maxCTFC               INTEGER ::= 16777215
maxLocalCellInNodeB   INTEGER ::= maxCellInNodeB
maxNoofLen             INTEGER ::= 7
maxRACHCell           INTEGER ::= maxPRACHCell
maxPRACHCell          INTEGER ::= 16
maxPCPCHCell          INTEGER ::= 64
maxSCCPCHCell         INTEGER ::= 32
maxSCPICHCell         INTEGER ::= 32
maxTTI-count          INTEGER ::= 4
maxIBSEG              INTEGER ::= 16
maxIB                  INTEGER ::= 64
maxFACHCell           INTEGER ::= 256 -- maxNrOfFACHs * maxSCCPCHCell
maxRateMatching       INTEGER ::= 256
maxCodeNrComp-1      INTEGER ::= 256
maxNrOfCodeGroups     INTEGER ::= 256
maxNrOfTFClGroups     INTEGER ::= 256
maxNrOfTFCl1Combs     INTEGER ::= 512
maxNrOfTFCl2Combs     INTEGER ::= 1024
maxNrOfTFCl2Combs-1   INTEGER ::= 1023
maxNrOfSF              INTEGER ::= 8
maxTGPS               INTEGER ::= 6
maxCommunicationContext INTEGER ::= 1048575
maxNrOfLevels         INTEGER ::= 256

-- *****
--
-- IEs
--
-- *****

id-AICH-Information          ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 1
id-BCH-Information          ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 8
id-BCCH-ModificationTime    ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator ProtocolIE-ID ::= 10
id-Cause                    ProtocolIE-ID ::= 13

```

id-CCP-InformationItem-AuditRsp	ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp	ProtocolIE-ID ::= 15
id-CCP-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 19
id-CellParameterID	ProtocolIE-ID ::= 23
id-CFN	ProtocolIE-ID ::= 24
id-C-ID	ProtocolIE-ID ::= 25
id-CommonMeasurementObjectType-CM-Rprt	ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst	ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp	ProtocolIE-ID ::= 33
id-CommonMeasurementType	ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID	ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 37
id-CommunicationControlPortID	ProtocolIE-ID ::= 40
id-ConfigurationGenerationID	ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID	ProtocolIE-ID ::= 44
id-CriticalityDiagnostics	ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD	ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD	ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 54
id-DCH-DeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 55
id-DCH-FDD-Information	ProtocolIE-ID ::= 56
id-DCH-TDD-Information	ProtocolIE-ID ::= 57
id-DCH-InformationResponse	ProtocolIE-ID ::= 59
id-FDD-DCHs-to-Modify	ProtocolIE-ID ::= 62
id-TDD-DCHs-to-Modify	ProtocolIE-ID ::= 63
id-DCH-ModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 65
id-DedicatedMeasurementObjectType-DM-Rprt	ProtocolIE-ID ::= 67
id-DedicatedMeasurementObjectType-DM-Rqst	ProtocolIE-ID ::= 68
id-DedicatedMeasurementObjectType-DM-Rsp	ProtocolIE-ID ::= 69
id-DedicatedMeasurementType	ProtocolIE-ID ::= 70
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 72
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 73
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 76
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 79
id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 83
id-DL-ReferencePowerInformationItem-DL-PC-Rqst	ProtocolIE-ID ::= 84
id-DLReferencePower	ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 86
id-DSCH-AddItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 87
id-DSCHs-to-Add-FDD	ProtocolIE-ID ::= 89
id-DSCH-DeleteItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 91
id-DSCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 96

id-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 100
id-DSCH-InformationResponse	ProtocolIE-ID ::= 105
id-DSCH-FDD-Information	ProtocolIE-ID ::= 106
id-DSCH-TDD-Information	ProtocolIE-ID ::= 107
id-DSCH-ModifyItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 108
id-DSCH-ModifyList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 112
id-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 113
id-FACH-Information	ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd	ProtocolIE-ID ::= 123
id-Local-Cell-ID	ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 128
id-AdjustmentPeriod	ProtocolIE-ID ::= 129
id-MaxAdjustmentStep	ProtocolIE-ID ::= 130
id-MaximumTransmissionPower	ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 132
id-MeasurementID	ProtocolIE-ID ::= 133
id-MessageStructure	ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst	ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID	ProtocolIE-ID ::= 143
id-P-CCPCH-Information	ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 145
id-P-CPICH-Information	ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 147
id-P-SCH-Information	ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 156
id-PCH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 157
id-PCH-Information	ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 165
id-PICH-Information	ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 168
id-PowerAdjustmentType	ProtocolIE-ID ::= 169
id-PRACH-Information	ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 176

id-PrimaryCPICH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 189
id-RACH-Information	ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 197
id-ReportCharacteristics	ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD	ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRqst	ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRqstFDD	ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRqstFDD	ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRqst	ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 214
id-RL-InformationList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 215
id-RL-InformationList-RL-SetupRqstFDD	ProtocolIE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady	ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-ReconfRsp	ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 221
id-RL-InformationResponseList-RL-ReconfReady	ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-ReconfRsp	ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 225
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 228
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 229
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure	ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 241

id-RL-Set-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 242
id-S-CCPCH-Information	ProtocolIE-ID ::= 247
id-S-CPICH-Information	ProtocolIE-ID ::= 249
id-SCH-Information	ProtocolIE-ID ::= 251
id-S-SCH-Information	ProtocolIE-ID ::= 253
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD	ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD	ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 264
id-SecondarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate	ProtocolIE-ID ::= 266
id-SFN	ProtocolIE-ID ::= 268
id-ShutdownTimer	ProtocolIE-ID ::= 269
id-Start-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 114
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 270
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 271
id-SyncCase	ProtocolIE-ID ::= 274
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH	ProtocolIE-ID ::= 275
id-T-Cell	ProtocolIE-ID ::= 276
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 277
id-TimeSlotConfigurationList-Cell-SetupRqstTDD	ProtocolIE-ID ::= 278
id-TransmissionDiversityApplied	ProtocolIE-ID ::= 279
id-TypeOfError	ProtocolIE-ID ::= 508
id-UARFCNforNt	ProtocolIE-ID ::= 280
id-UARFCNforNd	ProtocolIE-ID ::= 281
id-UARFCNforNu	ProtocolIE-ID ::= 282
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 284
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 285
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 288
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 289
id-UL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 291
id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 293
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 294
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 295
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 296
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 297
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD	ProtocolIE-ID ::= 300
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD	ProtocolIE-ID ::= 301
id-USCH-Information-Add	ProtocolIE-ID ::= 302
id-USCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 304
id-USCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 306
id-USCH-InformationResponse	ProtocolIE-ID ::= 309
id-USCH-Information	ProtocolIE-ID ::= 310
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 315
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 316
id-AdjustmentRatio	ProtocolIE-ID ::= 317
id-AP-AICH-Information	ProtocolIE-ID ::= 320
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 323

id-CauseLevel-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 324
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 329
id-CDCA-ICH-Information	ProtocolIE-ID ::= 330
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode	ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag	ProtocolIE-ID ::= 335
id-CPCH-Information	ProtocolIE-ID ::= 336
id-CPCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 342
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count	ProtocolIE-ID ::= 358
id-DPCHConstant	ProtocolIE-ID ::= 359
id-FACH-ParametersList-CTCH-SetupRsp	ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 375
id-PCPCH-Information	ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 380
id-PRACHConstant	ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 383
id-PUSCHConstant	ProtocolIE-ID ::= 384
id-RACH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 385
id-Synchronisation-Configuration-Cell-ReconfRqst	ProtocolIE-ID ::= 393
id-Synchronisation-Configuration-Cell-SetupRqst	ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 398
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 403
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 407
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 408
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 409

id-CommunicationContextInfoItem-Reset	ProtocolIE-ID ::= 412
id-CommunicationControlPortInfoItem-Reset	ProtocolIE-ID ::= 414
id-ResetIndicator	ProtocolIE-ID ::= 416
id-TFCI2-Bearer-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 417
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD	ProtocolIE-ID ::= 418
id-TFCI2-BearerInformationResponse	ProtocolIE-ID ::= 419
id-TimingAdvanceApplied	ProtocolIE-ID ::= 287
id-CFNReportingIndicator	ProtocolIE-ID ::= 6
id-SFNReportingIndicator	ProtocolIE-ID ::= 11
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 12
id-TimeslotISCPInfo	ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 47
id-InitDL-Power	ProtocolIE-ID ::= 509

END

9.3.7 Container Definitions

```
-- *****
--
-- Container definitions
--
-- *****

NBAP-Containers {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Containers (5) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    maxProtocolExtensions,
    maxPrivateIEs,
    maxProtocolIEs,
    Criticality,
    Presence,
    PrivateIE-ID,
    ProtocolIE-ID
FROM NBAP-CommonDataTypes;
```

```

-- *****
--
-- Class Definition for Protocol IEs
--
-- *****

NBAP-PROTOCOL-IES ::= CLASS {
    &id      ProtocolIE-ID          UNIQUE,
    &criticality  Criticality,
    &Value,
    &presence    Presence
}
WITH SYNTAX {
    ID          &id
    CRITICALITY &criticality
    TYPE        &Value
    PRESENCE    &presence
}

-- *****
--
-- Class Definition for Protocol IEs
--
-- *****

NBAP-PROTOCOL-IES-PAIR ::= CLASS {
    &id      ProtocolIE-ID          UNIQUE,
    &firstCriticality  Criticality,
    &FirstValue,
    &secondCriticality  Criticality,
    &SecondValue,
    &presence          Presence
}
WITH SYNTAX {
    ID          &id
    FIRST CRITICALITY  &firstCriticality
    FIRST TYPE        &FirstValue
    SECOND CRITICALITY &secondCriticality
    SECOND TYPE       &SecondValue
    PRESENCE         &presence
}

-- *****
--
-- Class Definition for Protocol Extensions
--
-- *****

NBAP-PROTOCOL-EXTENSION ::= CLASS {
    &id      ProtocolIE-ID          UNIQUE,
    &criticality  Criticality,
    &Extension,
    &presence    Presence
}

```



```

}
WITH SYNTAX {
    ID      &id
    CRITICALITY &criticality
    EXTENSION &Extension
    PRESENCE &presence
}

-- *****
--
-- Class Definition for Private IEs
--
-- *****

NBAP-PRIVATE-IES ::= CLASS {
    &id      PrivateIE-ID,
    &criticality Criticality,
    &Value,
    &presence Presence
}
WITH SYNTAX {
    ID      &id
    CRITICALITY &criticality
    TYPE    &Value
    PRESENCE &presence
}

-- *****
--
-- Container for Protocol IEs
--
-- *****

ProtocolIE-Container {NBAP-PROTOCOL-IES : IEsSetParam} ::=
    SEQUENCE (SIZE (0..maxProtocolIEs)) OF
        ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Single-Container {NBAP-PROTOCOL-IES : IEsSetParam} ::=
    ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Field {NBAP-PROTOCOL-IES : IEsSetParam} ::= SEQUENCE {
    id      NBAP-PROTOCOL-IES.&id      ({IEsSetParam}),
    criticality NBAP-PROTOCOL-IES.&criticality ({IEsSetParam}{@id}),
    value     NBAP-PROTOCOL-IES.&Value   ({IEsSetParam}{@id})
}

-- *****
--
-- Container for Protocol IE Pairs
--
-- *****

ProtocolIE-ContainerPair {NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=

```

```

SEQUENCE (SIZE (0..maxProtocolIEs)) OF
ProtocolIE-FieldPair {{IEsSetParam}}

ProtocolIE-FieldPair {NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::= SEQUENCE {
  id                NBAP-PROTOCOL-IES-PAIR.&id                ({IEsSetParam}),
  firstCriticality  NBAP-PROTOCOL-IES-PAIR.&firstCriticality  ({IEsSetParam}{@id}),
  firstValue        NBAP-PROTOCOL-IES-PAIR.&FirstValue        ({IEsSetParam}{@id}),
  secondCriticality NBAP-PROTOCOL-IES-PAIR.&secondCriticality ({IEsSetParam}{@id}),
  secondValue       NBAP-PROTOCOL-IES-PAIR.&SecondValue       ({IEsSetParam}{@id})
}

-- *****
--
-- Container Lists for Protocol IE Containers
--
-- *****

ProtocolIE-ContainerList {INTEGER : lowerBound, INTEGER : upperBound, NBAP-PROTOCOL-IES : IEsSetParam} ::=
  SEQUENCE (SIZE (lowerBound..upperBound)) OF
  ProtocolIE-Container {{IEsSetParam}}

ProtocolIE-ContainerPairList {INTEGER : lowerBound, INTEGER : upperBound, NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=
  SEQUENCE (SIZE (lowerBound..upperBound)) OF
  ProtocolIE-ContainerPair {{IEsSetParam}}

-- *****
--
-- Container for Protocol Extensions
--
-- *****

ProtocolExtensionContainer {NBAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::=
  SEQUENCE (SIZE (1..maxProtocolExtensions)) OF
  ProtocolExtensionField {{ExtensionSetParam}}

ProtocolExtensionField {NBAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::= SEQUENCE {
  id                NBAP-PROTOCOL-EXTENSION.&id                ({ExtensionSetParam}),
  criticality        NBAP-PROTOCOL-EXTENSION.&criticality        ({ExtensionSetParam}{@id}),
  extensionValue     NBAP-PROTOCOL-EXTENSION.&Extension         ({ExtensionSetParam}{@id})
}

-- *****
--
-- Container for Private IEs
--
-- *****

PrivateIE-Container {NBAP-PRIVATE-IES : IEsSetParam} ::=
  SEQUENCE (SIZE (1..maxPrivateIEs)) OF
  PrivateIE-Field {{IEsSetParam}}

PrivateIE-Field {NBAP-PRIVATE-IES : IEsSetParam} ::= SEQUENCE {
  id                NBAP-PRIVATE-IES.&id

```

```
{IesSetParam}),  
criticality      NBAP-PRIVATE-IES.&criticality  
{IesSetParam}{@id}),  
value           NBAP-PRIVATE-IES.&Value  
{IesSetParam}{@id})  
}  
  
END
```

9.4 Message Transfer Syntax

NBAP shall use the ASN.1 Basic Packed Encoding Rules (BASIC-PER) Aligned Variant as transfer syntax as specified in ref. [11].

The following encoding rules apply in addition to what has been specified in X.691 [11]:

When a bitstring value is placed in a bit-field as specified in 15.6 to 15.11 in [11], the leading bit of the bitstring value shall be placed in the leading bit of the bit-field, and the trailing bit of the bitstring value shall be placed in the trailing bit of the bit-field.

NOTE - When using the "bstring" notation, the leading bit of the bitstring value is on the left, and the trailing bit of the bitstring value is on the right. The term 'leading bit' is to be interpreted as equal to the term 'first bit' defined in [12].

9.5 Timers

$T_{Preempt}$

- Specifies the maximum time that a Node B may wait for pre-emption of resources for establishment or reconfiguration of Radio Links.

10 Handling of Unknown, Unforeseen and Erroneous Protocol Data

10.1 General

Protocol Error cases can be divided into three classes:

- Transfer Syntax Error
- Abstract Syntax Error
- Logical Error

Protocol errors can occur in the following functions within a receiving node:

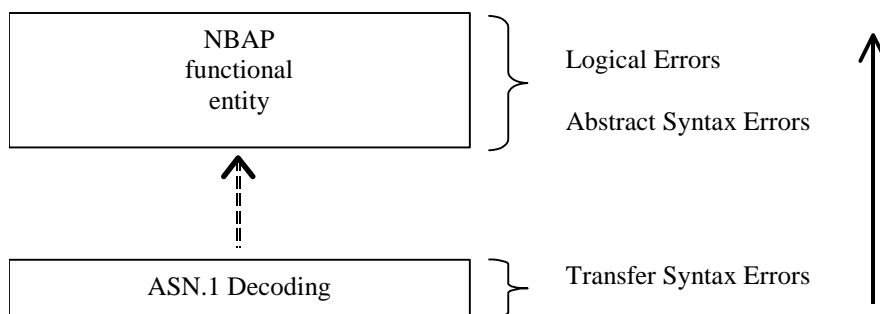


Figure 38: Protocol Errors in NBAP.

The information stated in subclauses 10.2, 10.3 and 10.4, to be included in the message used when reporting an error, is what at minimum shall be included. Other optional information elements within the message may also be included, if available. This is also valid for the case when the reporting is done with a response message. The latter is an exception to what is stated in subclause 4.1.

10.2 Transfer Syntax Error

A Transfer Syntax Error occurs when the receiver is not able to decode the received physical message. Transfer syntax errors are always detected in the process of ASN.1 decoding. If a Transfer Syntax Error occurs, the receiver should initiate Error Indication procedure with appropriate cause value for the Transfer Syntax protocol error.

Examples for Transfer Syntax Errors are:

- Violation of value ranges in ASN.1 definition of messages. e.g.: If an IE has a defined value range of 0 to 10 (ASN.1: INTEGER (0..10)), and 12 will be received, then this will be treated as a transfer syntax error.
- Violation in list element constraints. e.g.: If a list is defined as containing 1 to 10 elements, and 12 elements will be received, then this case will be handled as a transfer syntax error.
- Missing mandatory elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).
- Wrong order of elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).

10.3 Abstract Syntax Error

10.3.1 General

An Abstract Syntax Error occurs when the receiving functional NBAP entity:

1. receives IEs or IE groups that cannot be understood (unknown id);
2. receives IEs for which the logical range is violated (e.g.: ASN.1 definition: 0 to 15, the logical range is 0 to 10 (values 11 to 15 are undefined), and 12 will be received; this case will be handled as an abstract syntax error using criticality information sent by the originator of the message);
3. does not receive IEs or IE groups but according to the specified presence of the **concerningconcerned** object, the IEs or IE groups should have been present in the received message;
4. receives IEs or IE groups that are defined to be part of that message in wrong order or with too many occurrences of the same IE or IE group;
5. receives IEs or IE groups but according to the conditional presence of the **concerningconcerned** object and the specified condition, the IEs or IE groups should not have been present in the received message.

Cases 1 and 2 (not comprehended IE/IE group) are handled based on received Criticality information. Case 3 (missing IE/IE group) is handled based on Criticality information and Presence information for the missing IE/IE group specified in the version of the specification used by the receiver. Case 4 (IEs or IE groups in wrong order or with too many occurrences) and Case 5 (erroneously present conditional IEs or IE groups) result in rejecting the procedure.

If an Abstract Syntax Error occurs, the receiver shall read the remaining message and shall then for each detected Abstract Syntax Error that belong to cases 1-3 act according to the Criticality Information and Presence Information for the IE/IE group due to which Abstract Syntax Error occurred in accordance with subclauses 10.3.4 and 10.3.5. The handling of cases 4 and 5 is specified in subclause 10.3.6.

10.3.2 Criticality Information

In the NBAP messages there is criticality information set for individual IEs and/or IE groups. This criticality information instructs the receiver how to act when receiving an IE or an IE group that is not comprehended, i.e. the entire item (IE or IE group) which is not (fully or partially) comprehended shall be treated in accordance with its own criticality information as specified in subclause 10.3.4.

In addition, the criticality information is used in case of the missing IE/IE group abstract syntax error (see subclause 10.3.5).

The receiving node shall take different actions depending on the value of the Criticality Information. The three possible values of the Criticality Information for an IE/IE group are:

- Reject IE
- Ignore IE and Notify Sender
- Ignore IE

The following rules restrict when a receiving entity may consider an IE, an IE group or an EP not comprehended (not implemented), and when action based on criticality information is applicable:

1. IE or IE group: When one new or modified IE or IE group is implemented for one EP from a standard version, then other new or modified IEs or IE groups specified for that EP in that standard version shall be considered comprehended by the receiving entity (some may still remain unsupported).

Note that this restriction is applicable to a sending entity for constructing messages.

2. EP: The comprehension of different EPs within a standard version or between different standard versions is not mandated. Any EP that is not supported may be considered not comprehended, even if another EP from that standard version is comprehended, and action based on criticality shall be applied.

When the criticality information cannot even be decoded in a not comprehended IE or IE group, the Error Indication procedure shall be initiated with an appropriate cause value.

10.3.3 Presence Information

For many IEs/IE groups which are optional according to the ASN.1 transfer syntax, NBAP specifies separately if the presence of these IEs/IE groups is optional or mandatory with respect to RNS application by means of the presence field of the ~~concerning~~concerned object of class NBAP-PROTOCOL-IES, NBAP-PROTOCOL-IES-PAIR, NBAP-PROTOCOL-EXTENSION or NBAP-PRIVATE-IES.

The presence field of the indicated classes supports three values:

1. Optional;
2. Conditional;
3. Mandatory.

If an IE/IE group is not included in a received message and the presence of the IE/IE group is mandatory or the presence is conditional and the condition is true according to the version of the specification used by the receiver, an abstract syntax error occurs due to a missing IE/IE group.

If an IE/IE group is included in a received message and the presence of the IE/IE group is conditional and the condition is false according to the version of the specification used by the receiver, an abstract syntax error occurs due to this erroneously present conditional IE/IE group.

10.3.4 Not comprehended IE/IE group

10.3.4.1 Procedure ID

The receiving node shall treat the different types of received criticality information of the *Procedure ID* according to the following:

Reject IE:

- If a message is received with a *Procedure ID* marked with "*Reject IE*" which the receiving node does not comprehend, the receiving node shall reject the procedure using the Error Indication procedure.

Ignore IE and Notify Sender:

- If a message is received with a *Procedure ID* marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the procedure and initiate the Error Indication procedure.

Ignore IE:

- If a message is received with a *Procedure ID* marked with "Ignore IE" which the receiving node does not comprehend, the receiving node shall ignore the procedure.

When using the Error Indication procedure to reject a procedure or to report an ignored procedure it shall include the *Procedure ID* IE, the *Triggering Message* IE, and the *Procedure Criticality* IE in the *Criticality Diagnostics* IE.

10.3.4.1A Type of Message

When the receiving node cannot decode the *Type of Message* IE, the Error Indication procedure shall be initiated with an appropriate cause value.

10.3.4.2 IEs other than the Procedure ID and Type of Message

The receiving node shall treat the different types of received criticality information of an IE/IE group other than the *Procedure ID* according to the following:

Reject IE:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "Reject IE" which the receiving node does not comprehend; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the rejection of one or more IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report unsuccessful outcome is received containing one or more IEs/IE groups marked with "Reject IE" which the receiving node does not comprehend, the receiving node shall terminate the procedure and initiate the Error Indication procedure.
- If a *response* message is received containing one or more IEs/IE groups marked with "Reject IE" that the receiving node does not comprehend, the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

Ignore IE and Notify Sender:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "Ignore IE and Notify Sender" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups and report in the response message of the procedure that one or more IEs/IE groups have been ignored. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the response message, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report the outcome of the procedure is received containing one or more IEs/IE groups marked with "Ignore IE and Notify Sender" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups, and initiate the Error Indication procedure to report that one or more IEs/IE groups have been ignored.
- If a *response* message is received containing one or more IEs/IE groups marked with "Ignore IE and Notify Sender" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups and initiate the Error Indication procedure.

Ignore IE:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "Ignore IE" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and continue with the procedure as if the not comprehended IEs/IE groups were not received using the understood IEs/IE groups.

- If a *response* message is received containing one or more IEs/IE groups marked with "*Ignore IE*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and continue with the procedure as if the not comprehended IEs/IE groups were not received using the understood IEs/IE groups.

When reporting not comprehended IEs/IE groups marked with "*Reject IE*" or "*Ignore IE and Notify Sender*" using a response message defined for the procedure, the *Information Element Criticality Diagnostics IE* shall be included in the *Criticality Diagnostics IE* for each reported IE/IE group. In the *Information Element Criticality Diagnostics IE* the *Repetition Number IE* shall be included and in addition, if the not comprehended IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure IE* shall be included.

When reporting not comprehended IEs/IE groups marked with "*Reject IE*" or "*Ignore IE and Notify Sender*" using the Error Indication procedure, the *Procedure ID IE*, the *Triggering Message IE*, *Procedure Criticality IE*, the *Transaction ID IE*, and the *Information Element Criticality Diagnostics IE* shall be included in the *Criticality Diagnostics IE* for each reported IE/IE group. In the *Information Element Criticality Diagnostics IE* the *Repetition Number IE* shall be included and in addition, if the not comprehended IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure IE* shall be included.

10.3.5 Missing IE or IE gGroup

The receiving node shall treat the missing IE/IE group according to the criticality information for the missing IE/IE group in the received message specified in the version of this specification used by the receiver:

Reject IE:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Reject IE*"; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the missing IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a received message *initiating* a procedure that does not have a message to report unsuccessful outcome is missing one or more IEs/IE groups with specified criticality "*Reject IE*", the receiving node shall terminate the procedure and initiate the Error Indication procedure.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "*Reject IE*", the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

Ignore IE and Notify Sender:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and report in the response message of the procedure that one or more IEs/IE groups were missing. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the response message, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a received message *initiating* a procedure that does not have a message to report the outcome of the procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and initiate the Error Indication procedure to report that one or more IEs/IE groups were missing.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and initiate the Error Indication procedure to report that one or more IEs/IE groups were missing.

Ignore IE:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "Ignore IE", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "Ignore IE", the receiving node shall ignore that those IEs/IE groups are missing and continue with the procedure based on the other IEs/IE groups present in the message.

When reporting missing IEs/IE groups with specified criticality "Reject IE" or "Ignore IE and Notify Sender" using a response message defined for the procedure, the *Information Element Criticality Diagnostics* IE shall be included in the *Criticality Diagnostics* IE for each reported IE/IE group. In the *Information Element Criticality Diagnostics* IE, the *Repetition Number* IE shall be included and in addition, if the missing IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure* IE shall be included.

When reporting missing IEs/IE groups with specified criticality "Reject IE" or "Ignore IE and Notify Sender" using the Error Indication procedure, the *Procedure ID* IE, the *Triggering Message* IE, *Procedure Criticality* IE, the *Transaction ID* IE, and the *Information Element Criticality Diagnostics* IE shall be included in the *Criticality Diagnostics* IE for each reported IE/IE group. In the *Information Element Criticality Diagnostics* IE, the *Repetition Number* IE shall be included and in addition, if the missing IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure* IE shall be included.

10.3.6 IEs or IE groups Received in Wrong Order or With Too Many Occurrences or Erroneously Present

If a message with IEs or IE groups in wrong order or with too many occurrences is received or if IEs or IE groups with a conditional presence are present when the condition is not met (i.e. erroneously present), the receiving node shall behave according to the following:

- If a message *initiating* a procedure is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the cause value "Abstract Syntax Error (Falsely Constructed Message)" using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report unsuccessful outcome is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, the receiving node shall terminate the procedure and initiate the Error Indication procedure, and use cause value "Abstract Syntax Error (Falsely Constructed Message)".
- If a *response* message is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

When determining the correct order only the IEs specified in the specification version used by the receiver shall be considered.

10.4 Logical Error

Logical error situations occur when a message is comprehended correctly, but the information contained within the message is not valid (i.e. semantic error), or describes a procedure which is not compatible with the state of the receiver. In these conditions, the following behaviour shall be performed (unless otherwise specified) as defined by the class of the elementary procedure, irrespective of the criticality of the IEs/IE groups containing the erroneous values.

Class 1:

Where the logical error occurs in a request message of a class 1 procedure, and the procedure has a failure message, the failure message shall be sent with an appropriate cause value.

Typical cause values are:

- Protocol Causes:
 1. Semantic Error
 2. Message not compatible with receiver state

Where the logical error is contained in a request message of a class 1 procedure, and the procedure does not have a failure message, the procedure shall be terminated and the ERROR INDICATION procedure shall be initiated with an appropriate cause value. The *Procedure ID IE*, the *Triggering Message IE* and the *Transaction ID IE* within the *Criticality Diagnostics IE* shall then be included in order to identify the message containing the logical error.

Where the logical error exists in a response message of a class 1 procedure, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.

Class 2:

Where the logical error occurs in a message of a class 2 procedure, the procedure shall be terminated and the ERROR INDICATION procedure shall be initiated with an appropriate cause value. The *Procedure ID IE*, the *Triggering Message IE* and the *Transaction ID IE* within the *Criticality Diagnostics IE* shall then be included in order to identify the message containing the logical error.

10.5 Exceptions

The error handling for all the cases described hereafter shall take precedence over any other error handling described in the other subclauses of clause 10.

- If any type of error (Transfer Syntax Error, Abstract Syntax Error or Logical Error) is detected in the ERROR INDICATION message, it shall not trigger the Error Indication procedure in the receiving Node but local error handling.
- In case a response message, failure message or ERROR INDICATION message needs to be returned, but the information necessary to determine the receiver of that message is missing, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.

Annex A (normative): Allocation and Pre-emption of Radio Links in the Node B

A.1 Deriving Allocation Information for a Radio Link

A.1.1 Establishment of a New Radio Link

The Allocation Information for a Radio Link in the case of establishment of a new Radio Link shall be derived as follows:

- The latest received *Allocation/Retention Priority* IE for each transport channel shall be used.

Note: The *Allocation/Retention Priority* IE for a transport channel may have been received in

- a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B or
- b) a procedure adding or modifying the transport channel.

- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all transport channels that are intended to use the Radio Link is set to "no priority", the pre-emption capability of the Radio Link shall be set to ""shall not trigger pre-emption"".
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more of the transport channels that are intended to use the Radio Link is not set to ""no priority"", the allocation priority and the pre-emption capability of the Radio Link shall be set according to the following:
 - The transport channels that have the *Priority Level* IE in the *Allocation/Retention Priority* IE set to "no priority" shall be excluded when setting the allocation priority and pre-emption capability of a Radio Link.
 - The allocation priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all non excluded transport channels that are intended to use the Radio Link.
 - If all non-excluded transport channels that are intended to use a Radio Link to be established have the pre-emption capability, given by the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE, set to ""shall not trigger pre-emption"", the pre-emption capability of the Radio Link shall be set to "shall not trigger pre-emption".
If one or more non-excluded transport channels that are intended to use the Radio Link to be established have the value of the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE set to ""may trigger pre-emption"", the pre-emption capability of the Radio Link shall be set to ""may trigger pre-emption"".

The derived allocation priority and pre-emption capability are only valid during this allocation/retention process.

A.1.2 Modification of an Existing Radio Link

The Allocation Information for a Radio Link in the case of modification of a Radio Link (addition or modification of transport channels using the Radio Link) shall be derived as follows:

- The latest received *Allocation/Retention Priority* IE for each transport channel shall be used.

Note: The *Allocation/Retention Priority* IE for a transport channel may have been received in

- a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B,
- b) a previous procedure adding or modifying the transport channel, or
- c) the current procedure adding or modifying the transport channel.

- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all transport channels to be added or modified in the Radio Link is set to ""no priority"", the pre-emption capability of the Radio Link to be modified shall be set to "shall not trigger pre-emption".

- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more of the transport channels to be added or modified in the Radio Link is not set to “no priority”, the allocation priority of and the pre-emption capability of the Radio Link to be modified shall be set according to the following:
 - The transport channels to be added or modified that have the *Priority Level* IE in the *Allocation/Retention Priority* IE set to “no priority” shall be excluded when setting the allocation priority and pre-emption capability of a Radio Link to be modified.
 - The allocation priority for a Radio Link to be modified shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all the non-excluded transport channels that are to be added or modified.
 - If all non-excluded transport channels that are to be added or modified in the Radio Link have the pre-emption capability, given by the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE, set to “shall not trigger pre-emption”, the pre-emption capability of the Radio Link to be modified shall be set to “shall not trigger pre-emption”.
If one or more of the non-excluded transport channels to be added or modified in the Radio Link have the value of the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE set to “may trigger pre-emption”, the pre-emption capability of the Radio Link to be modified shall be set to “may trigger pre-emption”.

The derived allocation priority and pre-emption capability are only valid during this allocation/retention process.

A.2 Deriving Retention Information for a Radio Link

The Retention Information for an existing Radio Link shall be derived as follows:

- The latest received *Allocation/Retention Priority* IE for each transport channel shall be used.
- Note: The *Allocation/Retention Priority* IE for a transport channel may have been received in
- a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B or
 - b) a procedure adding or modifying the transport channel.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more transport channels using the Radio Link is set to “no priority”, the pre-emption vulnerability of the Radio Link shall be set to “not pre-emptable”.
 - If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all the transport channels using the Radio Link is not set to “no priority”, the retention priority of the Radio Link and the pre-emption vulnerability of the Radio Link shall be set according to the following:
 - The retention priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all transport channels that uses the Radio Link.
 - If all transport channels that uses the Radio Link have the pre-emption vulnerability, given by the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE, set to “pre-emptable”, the pre-emption vulnerability of the Radio Link shall be set to “pre-emptable”.
If one or more transport channels that uses the Radio Link have the value of the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE set to “not pre-emptable”, the pre-emption vulnerability of the Radio Link shall be set to “not pre-emptable”.

The derived retention priority and pre-emption vulnerability are valid until they are changed, or until the Radio Link is deleted. When new transport channels are added to or deleted from the Radio Link or when existing transport channels are modified with regards to the *Allocation/Retention Priority* IE, the retention information shall be derived again according to above.

A.3 The Allocation/Retention Process

The Node B shall establish or modify the resources for a Radio Link according to:

- The value of the Allocation Information (allocation priority and pre-emption capability) of the Radio Link to be established or modified. The Allocation Information is derived according to clause A.1.
- The value of the Retention Information (retention priority and pre-emption vulnerability) of existing Radio Links. The Retention Information derived according to clause A.2.
- The resource situation in the cell.

Whilst the process and the extent of the pre-emption functionality is operator dependent, the pre-emption indicators (pre-emption capability and pre-emption vulnerability) shall be treated as follows:

- If the pre-emption capability for a Radio Link to be established or modified is set to "may trigger pre-emption" and the resource situation so requires, the Node B may trigger the pre-emption process in clause A.4 to free resources for this allocation request.
- If the pre-emption capability for a Radio Link to be established or modified is set to "shall not trigger pre-emption", then this allocation request shall not trigger the pre-emption process in clause A.4.
- If the pre-emption vulnerability for an existing Radio Link is set to "pre-emptable", then this Radio Link shall be included in the pre-emption process in clause A.4.
- If the pre-emption vulnerability for an existing Radio Link is set to "not pre-emptable", then this Radio Link shall not be included in the pre-emption process in clause A.4.

A.4 The Pre-emption Process

The pre-emption process shall only pre-empt Radio Links with lower retention priority than the allocation priority of the Radio Link to be established or modified. The Radio Links to be pre-empted shall be selected in ascending order of the retention priority.

When the pre-emption process detects that one or more Radio Links have to be pre-empted to free resources for a Radio Link(s) to be established or modified, the Node B shall initiate the Radio Link Pre-emption procedure for all the Node B Communication Contexts having Radio Links selected for pre-emption and start the T_{Preempt} timer.

When enough resources are freed to establish or modify the Radio Link(s) according to the request, the Node B shall stop the T_{Preempt} timer and complete the procedure that triggered the pre-emption process in accordance with the "Successful Operation" subclause of the procedure.

If the T_{Preempt} timer expires, the Node B shall regard the procedure that triggered the pre-emption process as failed and complete the procedure in accordance with the "Unsuccessful Operation" subclause of the procedure.

Annex B (informative): Measurement Reporting

When the *Report Characteristics* IE is set to "Event A" (figure B.1), the Measurement Reporting procedure is initiated when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

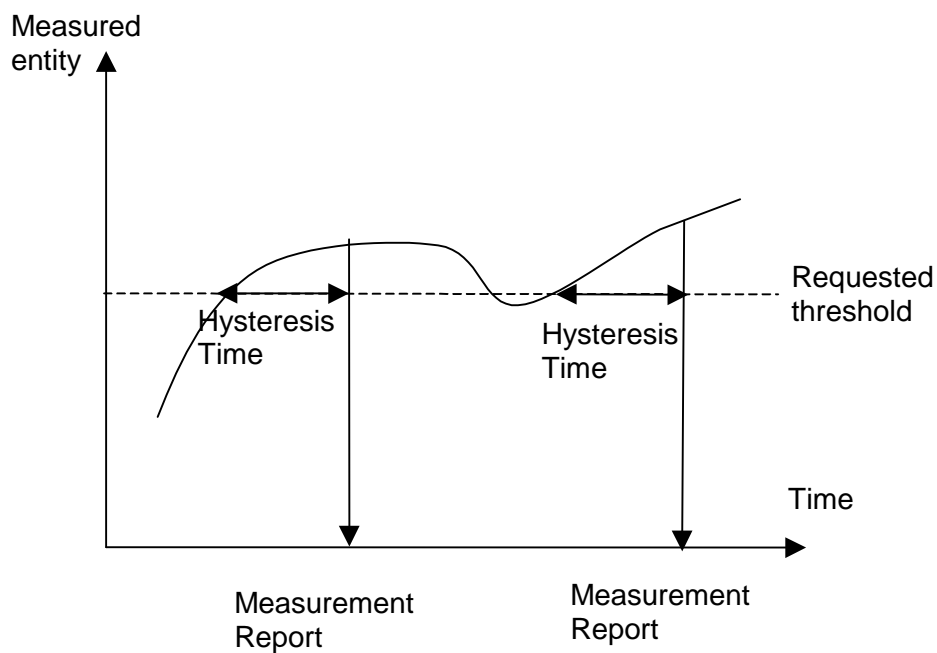


Figure B.1: Event A reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to "Event B" (figure B.2), the Measurement Reporting procedure is initiated when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

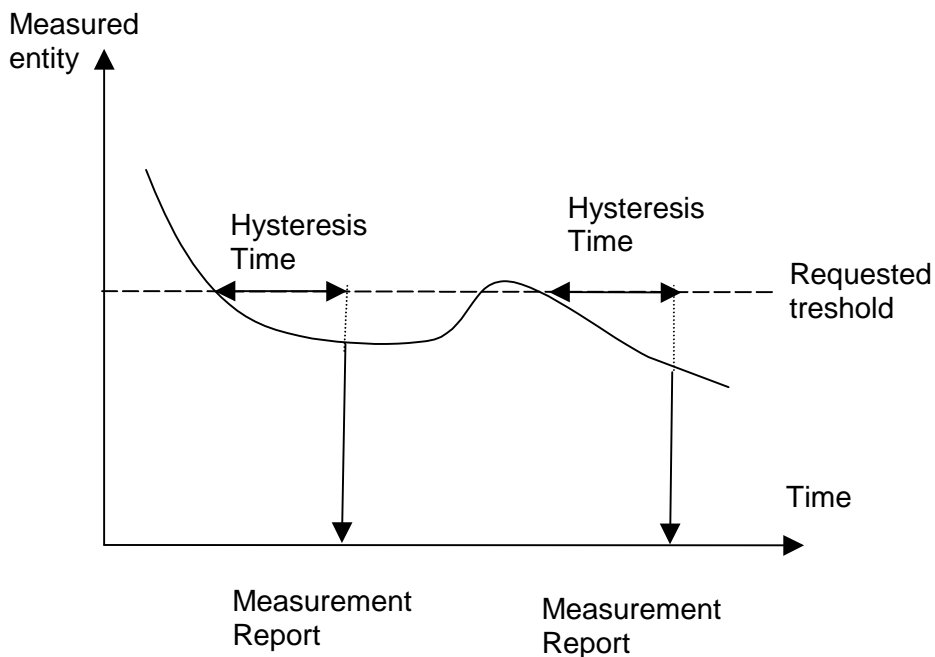


Figure B.2: Event B reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to "Event C" (figure B.3), the Measurement Reporting procedure is initiated always when the measured entity rises by an amount greater than the requested threshold within the requested time. The reporting in figure B.3 is initiated if the Rising Time T1 is less than the requested time.

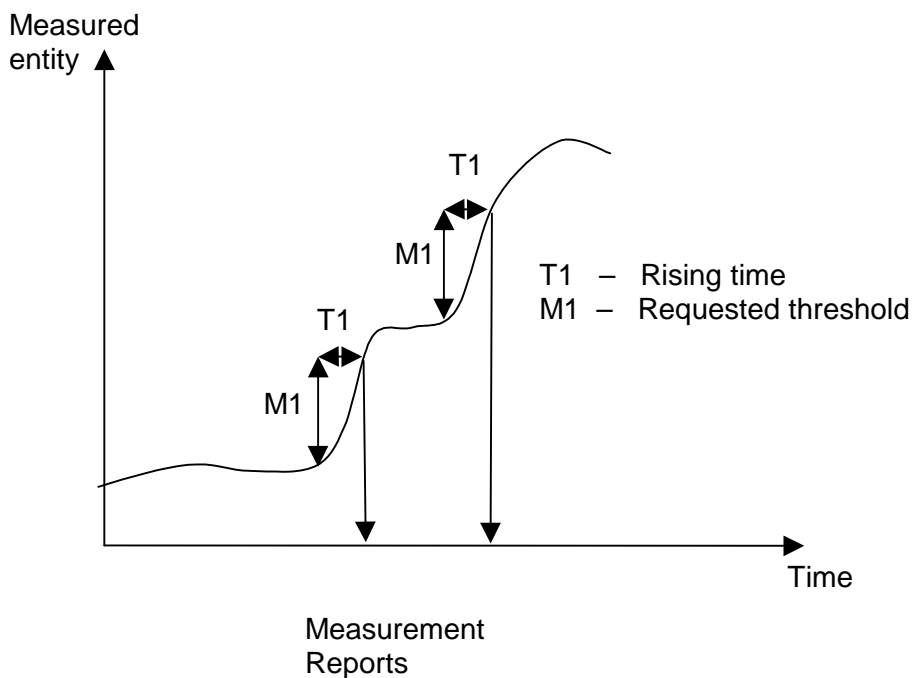


Figure B.3: Event C reporting

When the *Report Characteristics* IE is set to "Event D" (figure B.4), the Measurement Reporting procedure is initiated always when the measured entity falls by an amount greater than the requested threshold within the requested time. The reporting in figure B.4 is initiated if the Falling Time T1 is less than the requested time.

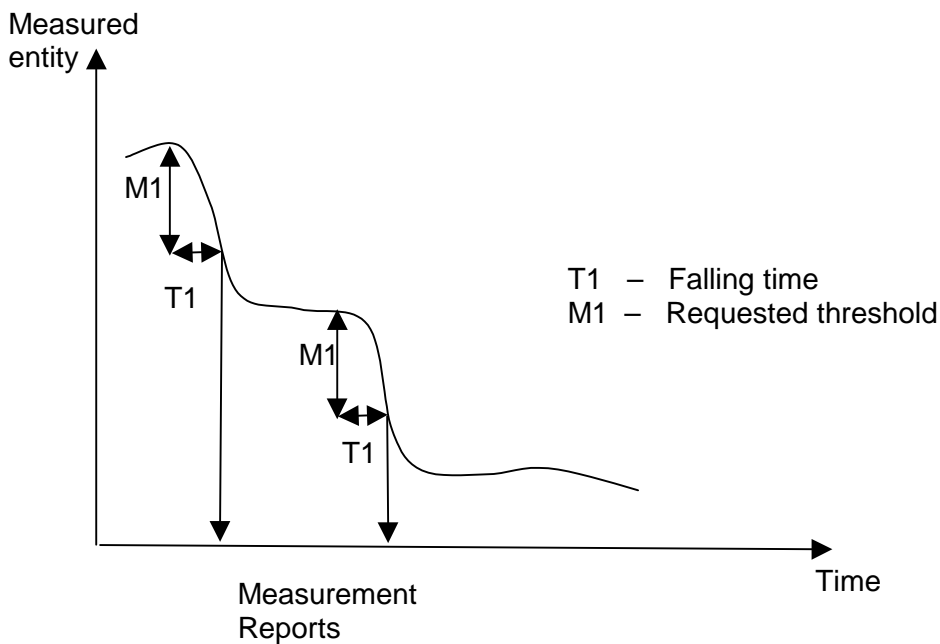


Figure B.4: Event D reporting

When the *Report Characteristics* IE is set to "Event E" (figure B.5), the Measurement Reporting procedure (Report A) is initiated always when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (T1 in figure B.5). If *Report Periodicity* IE is provided Node B shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity falls below the 'Measurement Threshold 1' and is terminated by the Report B.

When the Report A conditions have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time' (T1) the Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.

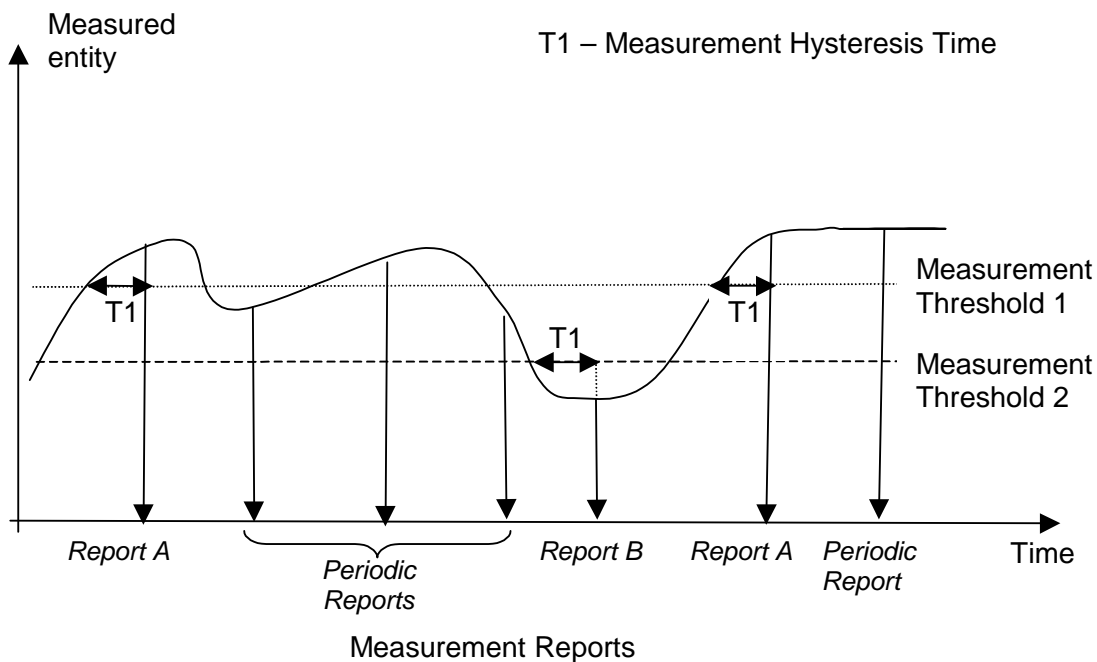


Figure B.5: Event E reporting with Hysteresis Time specified and Periodic Reporting requested

When the *Report Characteristics* IE is set to "Event F" (figure B.6), the Measurement Reporting procedure (Report A) is initiated always when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (T1 in figure B.6). If *Report Periodicity* IE is provided Node B shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity rises above the 'Measurement Threshold 1' and is terminated by the Report B.

When the Report A conditions have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time' (T1) Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.

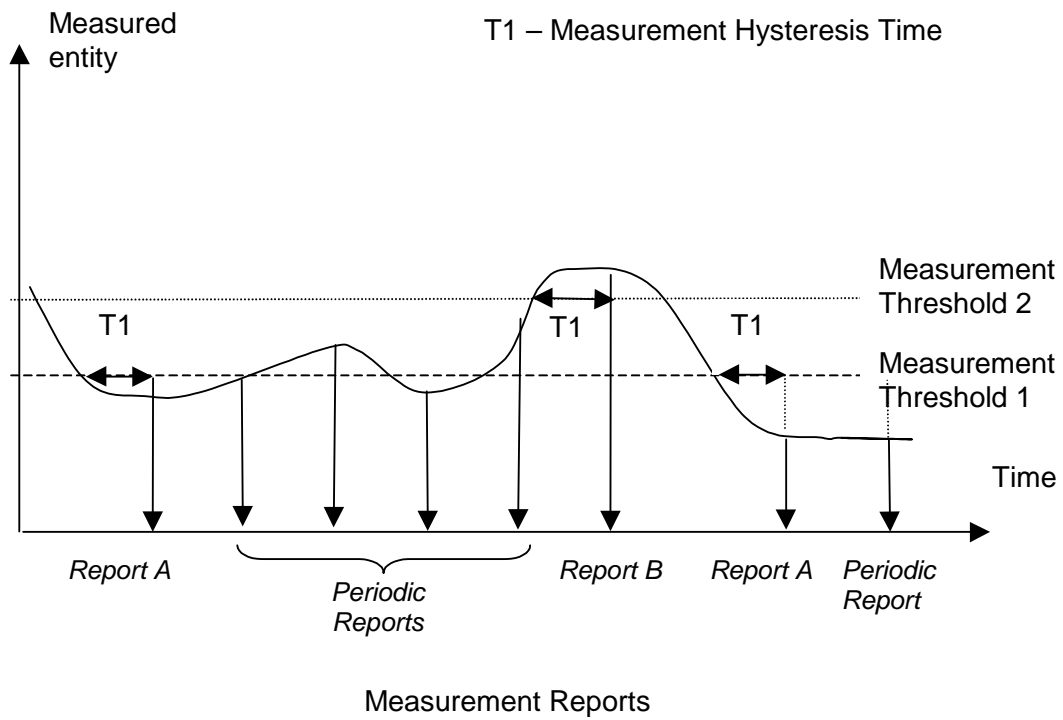


Figure B.6: Event F reporting with Hysteresis Time specified and Periodic Reporting requested

Annex C (informative): Guidelines for Usage of the Criticality Diagnostics IE

C.1 EXAMPLE MESSAGE Layout

Assume the following message format:

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
A	M				YES	reject
B	M				YES	reject
>E		1..<maxE>			EACH	ignore
>>F		1..<maxF>			–	
>>>G		0..3, ...			EACH	ignore
>>H		1..<maxH>			EACH	ignore
>>>G		0..3, ...			EACH	ignore and notify
>>G	M				YES	reject
>>J		1..<maxJ>			–	
>>>G		0..3, ...			EACH	reject
C	M				YES	reject
>K		1..<maxK>			EACH	ignore and notify
>>L		1..<maxL>			–	
>>>M	O				–	
D	M				YES	reject

Note 1. The IEs F, J, and L do not have assigned criticality. The IEs F, J, and L are consequently realised as the ASN.1 type SEQUENCE OF of "ordinary" ASN.1 type, e.g. INTEGER. On the other hand, the repeatable IEs with assigned criticality are realised as the ASN.1 type SEQUENCE OF of an IE object, e.g. ProtocolIE-Single-Container.

For the corresponding ASN.1 layout, see subclause C.4.

C.2 Example on a Received EXAMPLE MESSAGE

Assume further more that a received message based on the above tabular format is according to the figure below.

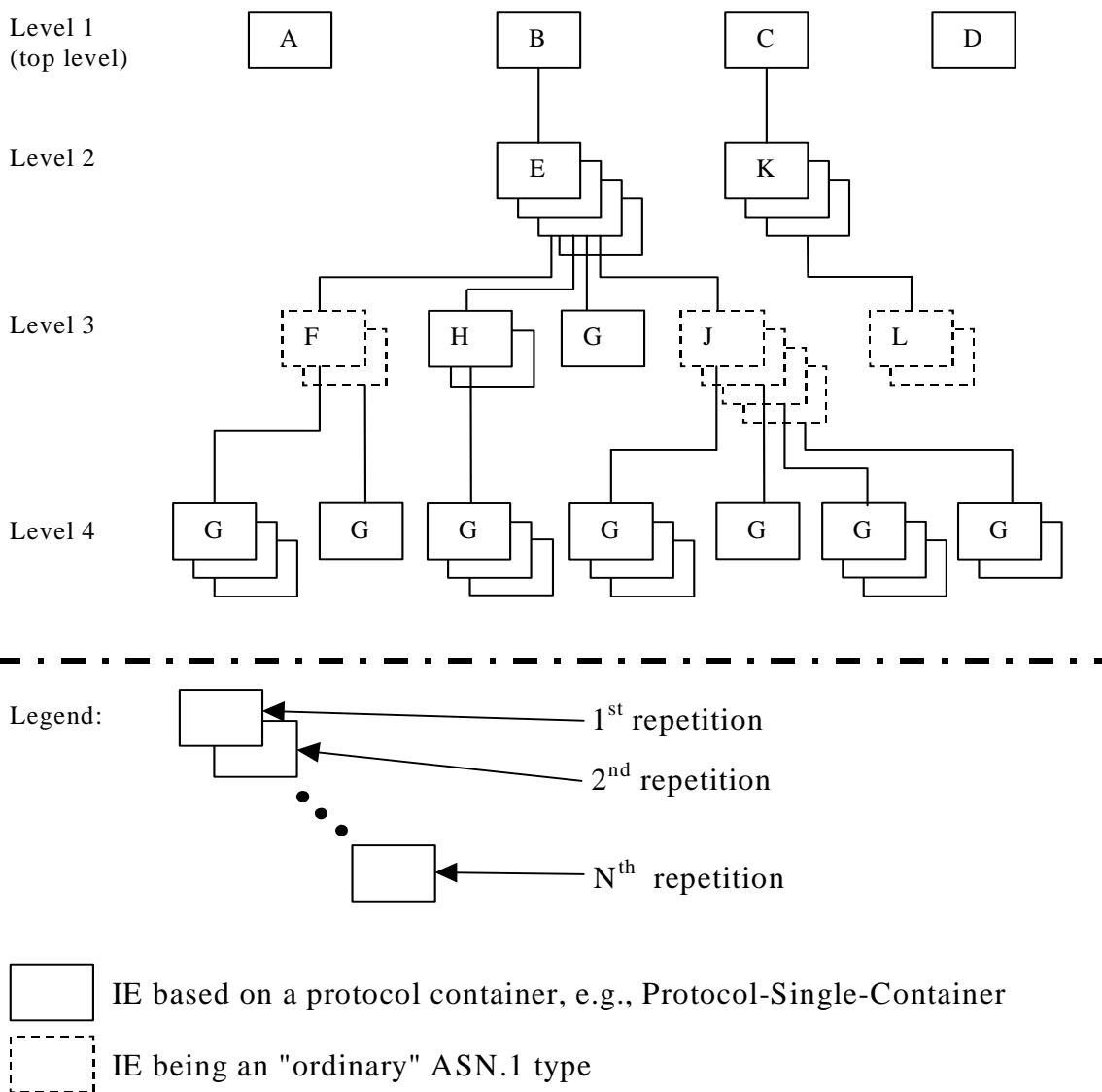
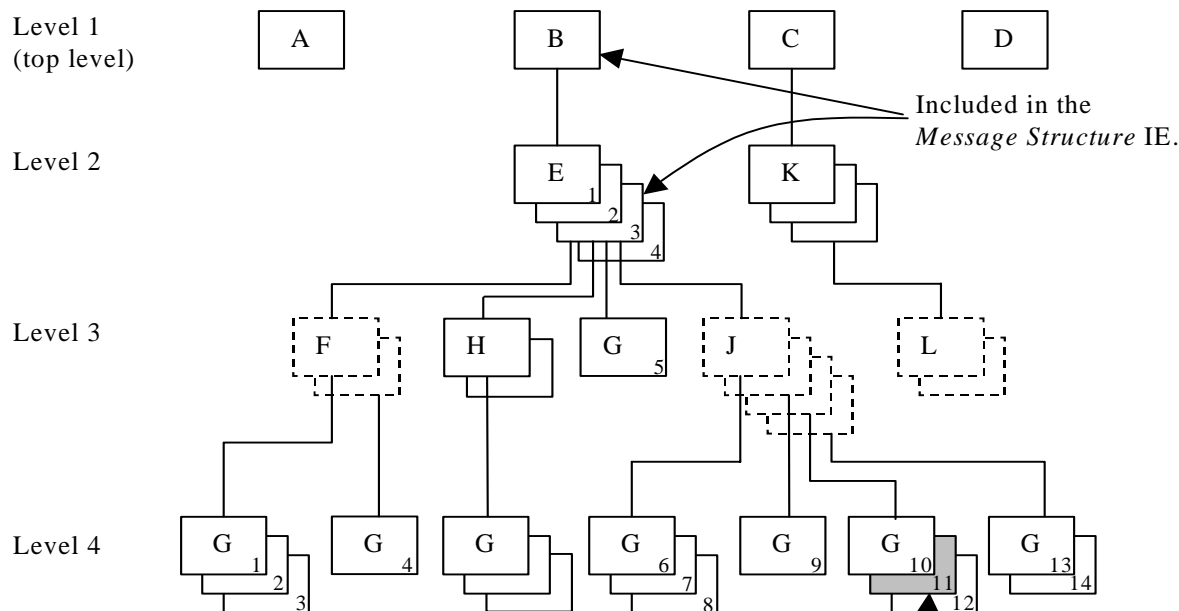


Figure C.1: Example of content of a received NBAP message based on the EXAMPLE MESSAGE

C.3 Content of Criticality Diagnostics

C.3.1 Example 1



Included in the *Information Element Criticality Diagnostics* IE:

- a) *IE ID* IE
- b) *Repetition Number* IE

Figure C.2: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE J shown in the figure C.2 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 4.
IE ID	id-G	IE ID from the reported level, i.e. level 4.
Repetition Number	11	Repetition number on the reported level, i.e. level 4. (Since the IE E (level 2) is the lowest level included in the <i>Message Structure</i> IE this is the eleventh occurrence of IE G within the IE E (level 2).)
Type of Error	not understood	
<i>Message Structure, first repetition</i>		
>IE ID	id-B	IE ID from level 1.
<i>Message Structure, second repetition</i>		
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.
>Repetition Number	3	Repetition number from the lowest level above the reported level, i.e. level 2.

- Note 2. The IE J on level 3 cannot be included in the *Message Structure* IE since they have no criticality of their own.
- Note 3. The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

C.3.2 Example 2

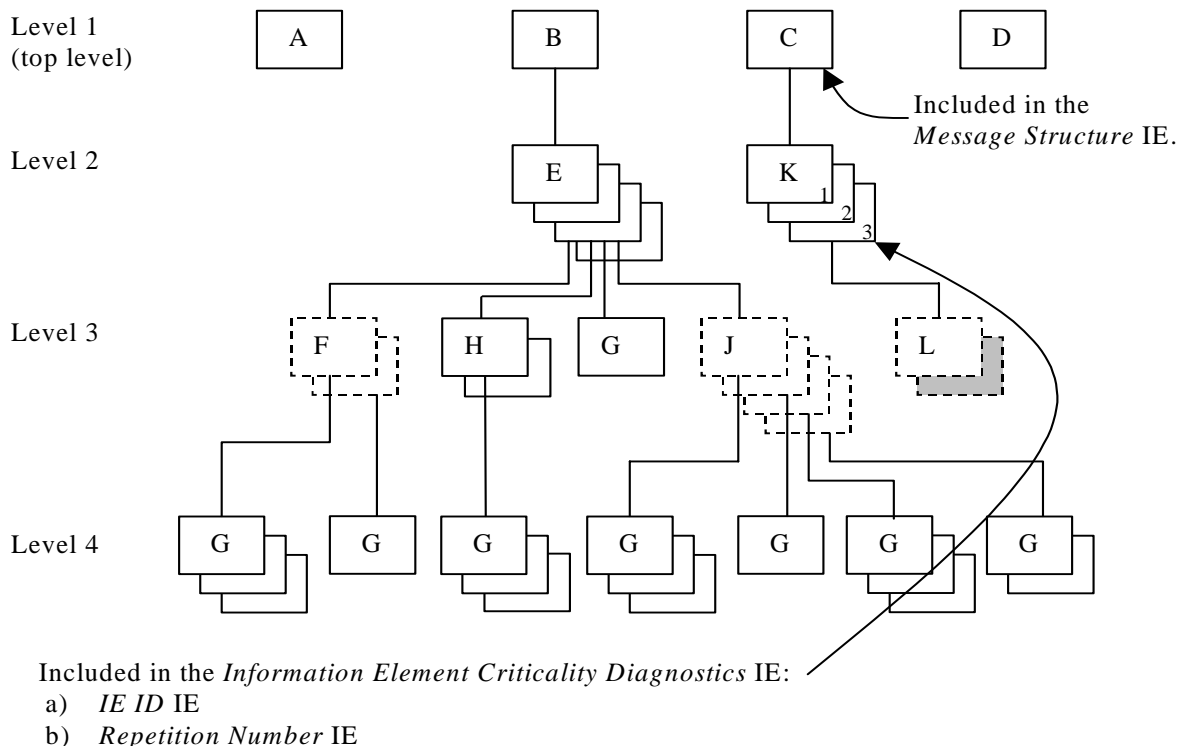


Figure C.3: Example of a received NBAP message containing a not comprehended IE

If there is an error within the second instance (marked as grey) in the sequence (IE L in the tabular format) on level 3 below IE K in the structure shown in the figure C.3 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	ignore and notify	Criticality for IE on the reported level, i.e. level 2.
IE ID	id-K	IE ID from the reported level, i.e. level 2.
Repetition Number	3	Repetition number on the reported level, i.e. level 2.
Type of Error	not understood	
<i>Message Structure, first repetition</i>		
>IE ID	id-C	IE ID from the lowest level above the reported level, i.e. level 1.

Note 4. The IE L on level 3 cannot be reported individually included in the *Message Structure* IE since it has no criticality of its own.

C.3.3 Example 3

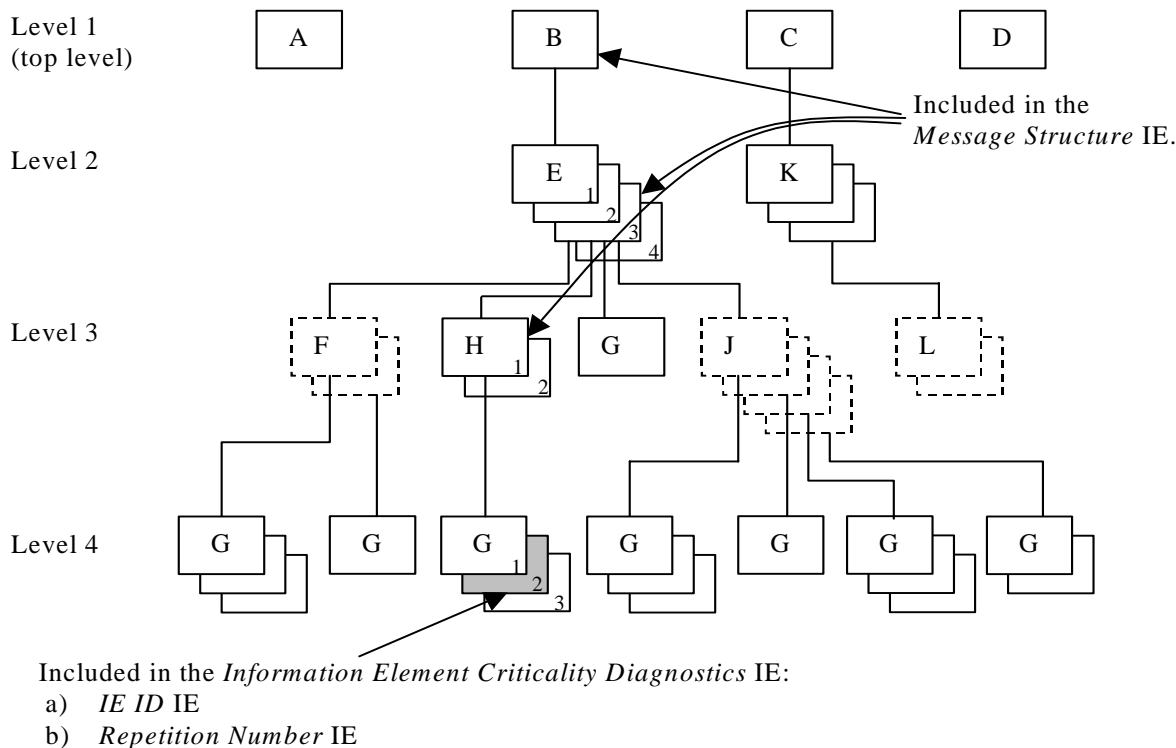


Figure C.4: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE H shown in the figure C.4 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 4.
IE ID	id-G	IE ID from the reported level, i.e. level 4.
Repetition Number	2	Repetition number on the reported level, i.e. level 4.
Type of Error	not understood	
<i>Message Structure, first repetition</i>		
>IE ID	id-B	IE ID from level 1.
<i>Message Structure, second repetition</i>		
>IE ID	id-E	IE ID from level 2.
>Repetition Number	3	Repetition number from level 2.
<i>Message Structure, third repetition</i>		
>IE ID	id-H	IE ID from the lowest level above the reported level, i.e. level 3.
>Repetition Number	1	Repetition number from the lowest level above the reported level, i.e. level 3.

Note 5. The repetition number of level 4 indicates the number of repetitions of IE G received up to the detected erroneous repetition, counted below the same instance of the previous level with assigned criticality (instance 1 of IE H on level 3).

C.3.4 Example 4

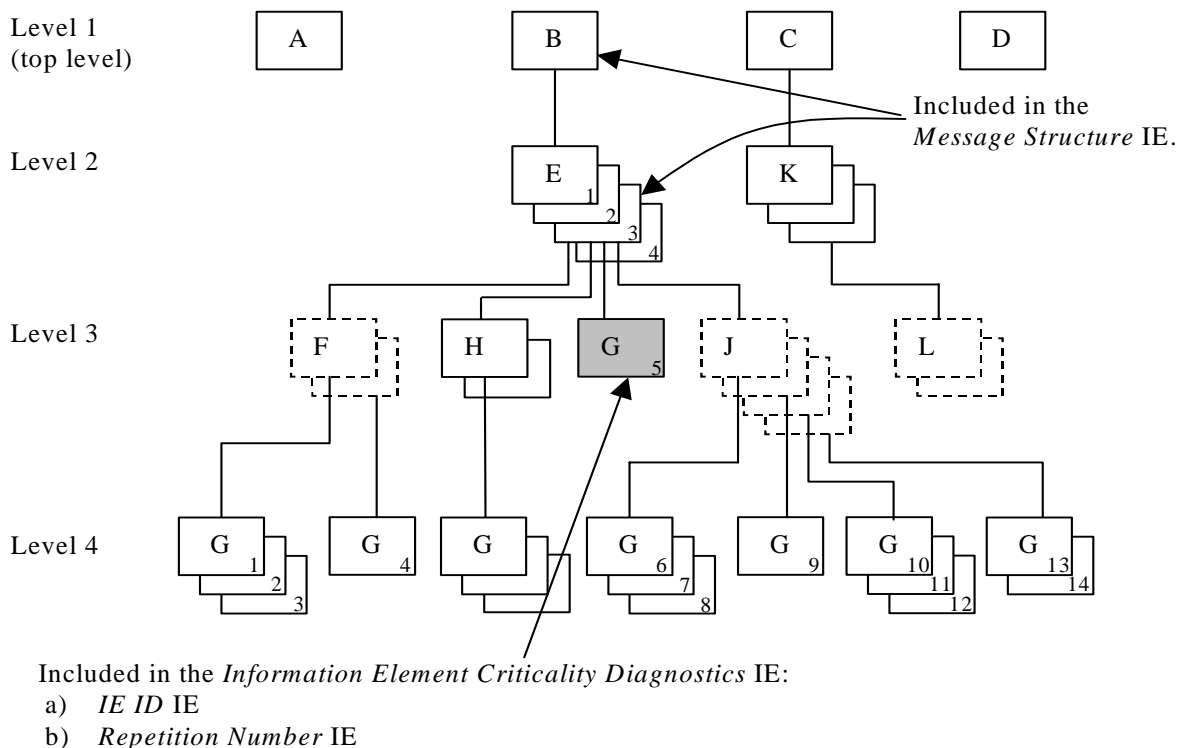


Figure C.5: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE E shown in the figure C.5 above, this will be reported within the *Information Element Criticality Diagnostics IE* within the *Criticality Diagnostics IE* as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 3.
IE ID	id-G	IE ID from the reported level, i.e. level 3.
Repetition Number	5	Repetition number on the reported level, i.e. level 3. (Since the IE E (level 2) is the lowest level included in the <i>Message Structure IE</i> this is the fifth occurrence of IE G within the IE E (level 2).
Type of Error	not understood	
<i>Message Structure, first repetition</i>		
>IE ID	id-B	IE ID from level 1.
<i>Message Structure, second repetition</i>		
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.
>Repetition Number	3	Repetition number from the lowest level above the reported level, i.e. level 2.

Note 6. The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

C.3.5 Example 5

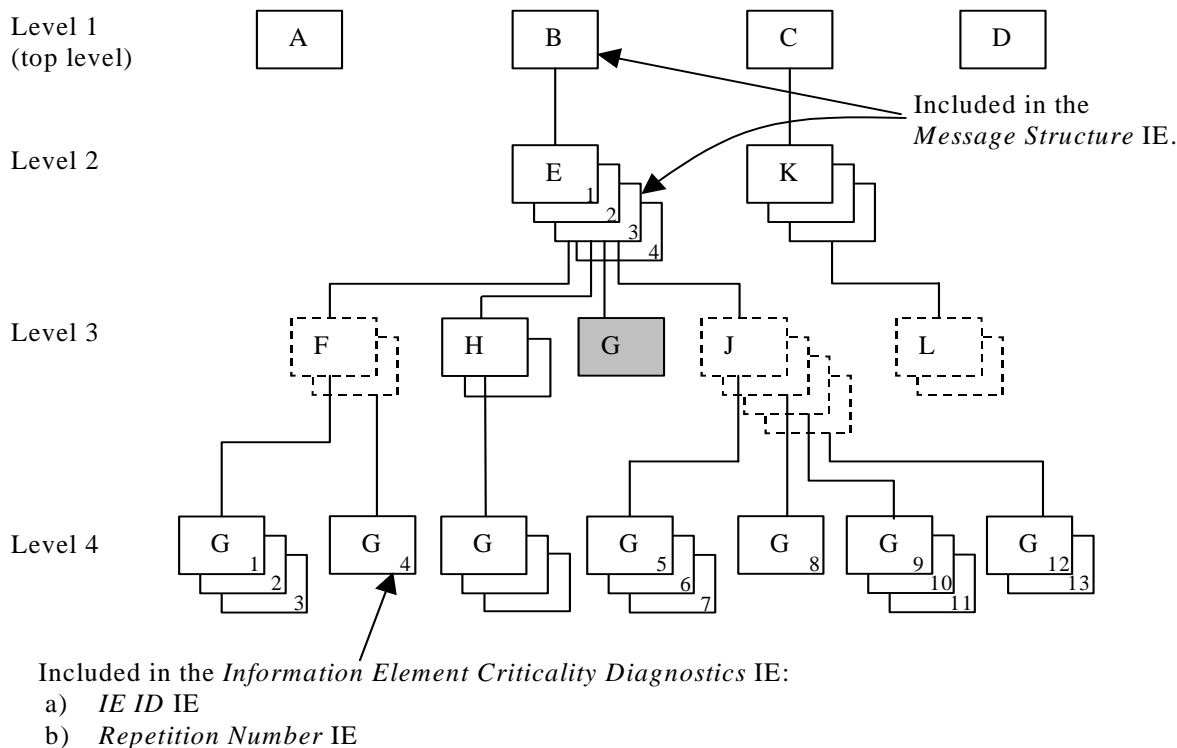


Figure C.6: Example of a received NBAP message with a missing IE

If the instance marked as grey in the IE G in the IE E shown in the figure C.6 above, is missing this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 3.
IE ID	id-G	IE ID from the reported level, i.e. level 3.
Repetition Number	4	Repetition number up to the missing IE on the reported level, i.e. level 3. (Since the IE E (level 2) is the lowest level included in the <i>Message Structure</i> IE there have been four occurrences of IE G within the IE E (level 2) up to the missing occurrence.
Type of Error	missing	
<i>Message Structure, first repetition</i>		
>IE ID	id-B	IE ID from level 1.
<i>Message Structure, second repetition</i>		
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.
>Repetition Number	3	Repetition number from the lowest level above the reported level, i.e. level 2.

Note 7. The repetition number of the reported IE indicates the number of repetitions of IE G received up to but not including the missing occurrence, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

C.4 ASN.1 of EXAMPLE MESSAGE

```

ExampleMessage ::= SEQUENCE {
    ProtocolIEs          ProtocolIE-Container          {{ExampleMessage-IEs}},
    ProtocolExtensions  ProtocolExtensionContainer    {{ExampleMessage-Extensions}}  OPTIONAL,
    ...
}

ExampleMessage-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-A    CRITICALITY reject  TYPE A  PRESENCE mandatory } |
    { ID id-B    CRITICALITY reject  TYPE B  PRESENCE mandatory } |
    { ID id-C    CRITICALITY reject  TYPE C  PRESENCE mandatory } |
    { ID id-D    CRITICALITY reject  TYPE D  PRESENCE mandatory } ,
    ...
}

B ::= SEQUENCE {
    e                E-List,
    iE-Extensions   ProtocolExtensionContainer { {B-ExtIEs} }  OPTIONAL,
    ...
}

B-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

E-List ::= SEQUENCE (SIZE (1..maxE)) OF ProtocolIE-Single-Container { {E-IEs} }

E-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-E    CRITICALITY ignore  TYPE E  PRESENCE mandatory }
}

E ::= SEQUENCE {
    f                F-List,
    h                H-List,
    g                G-List1,
    j                J-List,
    iE-Extensions   ProtocolExtensionContainer { {E-ExtIEs} }  OPTIONAL,
    ...
}

E-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

F-List ::= SEQUENCE (SIZE (1..maxF)) OF F

F ::= SEQUENCE {
    g                G-List2 OPTIONAL,
    iE-Extensions   ProtocolExtensionContainer { {F-ExtIEs} }  OPTIONAL,
    ...
}

F-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

G-List2 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G2-IEs} }

G2-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-G    CRITICALITY ignore  TYPE G  PRESENCE mandatory }
}

H-List ::= SEQUENCE (SIZE (1..maxH)) OF ProtocolIE-Single-Container { {H-IEs} }

H-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-H    CRITICALITY ignore  TYPE H  PRESENCE mandatory }
}

H ::= SEQUENCE {
    g                G-List3 OPTIONAL,
    iE-Extensions   ProtocolExtensionContainer { {H-ExtIEs} }  OPTIONAL,
    ...
}

H-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
G-List3 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G3-IEs} }

G3-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-G    CRITICALITY notify  TYPE G  PRESENCE mandatory }
}

G-List1 ::= ProtocolIE-Single-Container { {G1-IEs} }

G1-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-G    CRITICALITY reject  TYPE G  PRESENCE mandatory }
}

J-List ::= SEQUENCE (SIZE (1..maxJ)) OF J

J ::= SEQUENCE {
  g                G-List4 OPTIONAL,
  iE-Extensions   ProtocolExtensionContainer { {J-ExtIEs} } OPTIONAL,
  ...
}

J-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

G-List4 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G4-IEs} }

G4-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-G    CRITICALITY reject  TYPE G  PRESENCE mandatory }
}

C ::= SEQUENCE {
  k                K-List,
  iE-Extensions   ProtocolExtensionContainer { {C-ExtIEs} } OPTIONAL,
  ...
}

C-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

K-List ::= SEQUENCE (SIZE (1..maxK)) OF ProtocolIE-Single-Container { {K-IEs} }

K-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-K    CRITICALITY notify  TYPE K  PRESENCE mandatory }
}

K ::= SEQUENCE {
  l                L-List,
  iE-Extensions   ProtocolExtensionContainer { {K-ExtIEs} } OPTIONAL,
  ...
}

K-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

L-List ::= SEQUENCE (SIZE (1..maxL)) OF L

L ::= SEQUENCE {
  m                M OPTIONAL,
  iE-Extensions   ProtocolExtensionContainer { {L-ExtIEs} } OPTIONAL,
  ...
}

L-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

ExampleMessage-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

CHANGE REQUEST

⌘ **25.433 CR 669** ⌘ rev **2** ⌘ Current version: **4.4.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title: ⌘ NBAP Review – Alignment on the ASN.1 and correction of the procedure text.

Source: ⌘ R-WG3

Work item code: ⌘ TEI

Date: ⌘ May 2002

Category: ⌘ **F**

Release: ⌘ REL-4

Use one of the following categories:

- F** (essential correction)
- A** (corresponds to a correction in an earlier release)
- B** (Addition of feature),
- C** (Functional modification of feature)
- D** (Editorial modification)

Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

- 2** (GSM Phase 2)
- R96** (Release 1996)
- R97** (Release 1997)
- R98** (Release 1998)
- R99** (Release 1999)
- REL-4** (Release 4)
- REL-5** (Release 5)

Reason for change: ⌘ The tabular format is not fully aligned on the ASN.1 description.

Summary of change: ⌘ This CR corrects the tabular format to align it to the ASN.1 specification. This CR also corrects editorial errors in the specification. Below is the list of all the corrections that are not purely editorial.

R1 Corrections (highlighted in light blue):

- "Hysterisis" corrected to "Hysteresis". Applied in the following subclauses: 8.2.8, 8.3.8, New 9.2.1.41A,
- "UTRAN GPS Timing of Cell Frame for LCS" is corrected to "UTRAN GPS Timing of Cell Frames for UE Positioning" which is the accurate name of the measurement according to TSs 25.215 & 25.225. Applied in the following subclauses: 8.2.8, 9.2.1.11, 9.2.1.12, 9.2.1.44, 9.2.1.64A, 9.2.1.64B, 9.2.1.64C
- References to the *Diversity Indication* IE in the procedure text are removed to be in line with the correction removing this IE. Applied in the following subclauses: 8.2.17.2, 8.3.1.2.
- Sentences linking the start of reception on the Uu and the sending of the RADIO LINK SETUP/ADDITION RESPONSE on the lub are removed. A sentence is added to handle when the reception on the Uu should be started. Applied in the following subclauses: 8.2.17.2, 8.3.1.2.
- A sentence is included to indicate when the Node B shall include the *Communication Control Port Id* IE. Applied in the following subclauses: 8.2.17.3.
- The *Diversity Indication* IE and the corresponding condition are removed from the tabular format. Applied in the following subclauses: 9.1.37.1, 9.1.38.1.

- The *Diversity Indication* IE is removed from the tabular format. Applied in the following subclauses:
9.1.40.1, 9.1.40.2, 9.1.41.1.

9.2.1.26:

The section describing the *Diversity Indication* IE is voided.

9.2.1.31G:

The "..." are replaced by ".." in the INTEGER description.

9.2.1.47A:

The sentence describing the IE is corrected.

9.2.2.53B:

The reference is updated to TS 25.213 ([9]) as only this specification holds details on the alternative scrambling code scheme, not RRC (which is currently referenced).

9.3.3:

- The comment on the "diversityIndication" is removed in the following messages:
 - RADIO LINK SETUP RESPONSE FDD.
 - RADIO LINK SETUP FAILURE FDD
 - RADIO LINK ADDITION RESPONSE FDD
 - RADIO LINK ADDITION RESPONSE TDD
 - RADIO LINK ADDITION FAILURE FDD.

9.3.4:

"uTRAN-GPS-Timing-of-Cell-Frames-for-LCS" is corrected in the Enumeration to "uTRAN-GPS-Timing-of-Cell-Frames-for-UE-Positioning" which is the accurate name of the measurement according to TSs 25.215 & 25.225.

R0 Corrections (highlighted in yellow):

7:

Clarification for the Common and Dedicated Measurement functions.

8.1:

Removal of the usage of the "UE Context" terminology (replaced by "Node B Communication Context").

8.2.1:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to use the name of the IE and to clarify the channels to be configured and activated.

8.2.2:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to use the name of the IE and to clarify the channels to be configured and activated.

8.2.3:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to use the name of the IE and to clarify the channels to be configured and activated.

8.2.4:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to remove specification text that is handled by the Conditional Presence of the *Shutdown Timer* IE.

8.2.5:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to reflect the fact that the resource that is unblocked is always a Cell (by means of the *C-ID* IE).

8.2.6:

- Clarification of the Port to be used for the procedure.

8.2.7:

- Clarification of the Port to be used for the procedure.

8.2.8:

- References to the *Common Measurement Object Type* IE in the procedure text are removed to be in line with the correction removing this IE (see 9.1.18 & 9.2.1.10).
- The procedure text is changed to use the proper names of the messages and the IEs that are used.

8.2.9:

- The procedure text is changed to use the proper name of IEs (in this case the *Measurement ID* IE).

8.2.10:

- The procedure text is changed to use the proper name of IEs (in this case the *Measurement ID* IE).

8.2.12:

- Clarification of the Port to be used for the procedure.
- Clarification in the Abnormal Conditions.

8.2.13:

- Clarification of the Port to be used for the procedure.
- Clarification of the IEs used in the Synchronisation Configuration.

8.2.14:

- Clarification of the Port to be used for the procedure.

8.2.15:

- Clarification of the Port to be used for the procedure.
- References to the *Indication Type* IE in the procedure text are removed to be in line with the correction removing this IE (see 9.1.32 & 9.2.1.36).

8.2.16:

- Clarification of the Port to be used for the procedure.
- The procedure text for the Unsuccessful Operation is slightly changed.

8.2.17:

- Clarification of the Port to be used for the procedure.
- The procedure text is corrected as DCHs are not added in the Radio Link Setup procedure.
- The procedure text for the RADIO LINK SETUP RESPONSE in the case of combining is changed as the *Reference RL ID* IE does not exist and the *RL ID* IE indicating one RL with which the concerned RL is combined is mandatory in this case
- Usage of the proper terminology "set of co-ordinated DCHs".
- Clarification that the N_OUTSYNC_IND and T_RLFAILURE parameters are used for the out-of-synch algorithm and the N_INSYNCH_IND parameter is used for the in-synch algorithm.
- Removal of redundant text on the beginning of reception of new RLs.

8.2.18:

- Clarification of the Port to be used for the procedure.
- The procedure text is corrected for the case of the PDSCH/PUSCH Deletion.

8.2.26:

- Numbering of the section on Abnormal Conditions is corrected.

8.3.1:

- Clarification of the Port to be used for the procedure.
- The procedure text is corrected to use the name of the IEs that are actually used (in this case *RL ID*, *Transport Layer Address*, *Binding ID*).
- The procedure text for the RADIO LINK ADDITION RESPONSE in the case of combining is changed to reflect the fact that the *RL ID* IE indicates one RL with which the concerned RL is combined.

- Usage of the proper terminology "set of co-ordinated DCHs".
- References to the UE are replaced by Node B Communication Context where applicable.
- Clarification that the N_OUTSYNC_IND and T_RLFAILURE parameters are used for the out-of-synch algorithm and the N_INSYNCH_IND parameter is used for the in-synch algorithm.
- Clarification as to when the Unsuccessful Operation shall be used.
- Appropriate FDD tagging for the case of a "partly" unsuccessful Radio Link Addition.

8.3.2:

- References to the UE are replaced by Node B Communication Context where applicable.
- The procedure text is corrected to use the name of the IEs that are actually used (in this case *Transport Layer Address*, *Binding ID*).

8.3.5:

- Corrections for DCHs that are added and not modified.

8.3.6:

- Clarification of the Port to be used for the procedure.
- Clarification that the N_OUTSYNC_IND and T_RLFAILURE parameters are used for the out-of-synch algorithm and the N_INSYNCH_IND parameter is used for the in-synch algorithm.

8.3.7:

- Clarification of the Port to be used for the procedure.
- References to the UE are replaced by Node B Communication Context where applicable.

8.3.8:

- References to the *Dedicated Measurement Object Type* IE in the procedure text are removed to be in line with the correction removing this IE (see 9.1.52 & 9.2.1.24).
- The procedure text is changed to use the proper names of the messages and IEs that are used.

8.3.9:

- The procedure text is changed to use the proper name of IEs (in this case the *Measurement ID* IE).
- Inclusion of the references to 25.123 and 25.133 (in line with the existing text in the Common Measurement procedures).

8.3.10:

- The procedure text is changed to use the proper name of IEs (in this case the *Measurement ID* IE).

8.3.12:

- Clarification of the Port to be used for the procedure.
- References to the UE are replaced by Node B Communication Context where applicable.

8.3.13:

- Clarification of the Port to be used for the procedure.

8.3.14:

- References to the UE are replaced by Node B Communication Context where applicable.
- Clarification of how the procedure is initiated and which Port is used.

8.3.15:

- Clarification of the Port to be used for the procedure.

8.3.16:

- Clarification of the Port to be used for the procedure.

9.1 General Correction:

Everywhere where applicable the *Transaction ID* IE has been moved just after the

Message Type IE in the tabular format (for all messages in subclauses from 9.1.36.1 to 9.1.61 included & subclause 9.1.67). This is in line with the ASN.1 definition where the *Transaction ID* IE is defined as part of the "header" of the message whereas the *Node B Communication Context* IE and/or *CRNC Communication Context* IE are part of the message PDU.

9.1.3.1:

One indentation added to *AICH Parameters* IE. This is an alignment on the ASN.1.

9.1.3.2:

- Criticality of *PCH Power* IE is added (extension due to LCR TDD).
- Criticality Information for *PRACH LCR* IE is set to "GLOBAL".
- Criticality Information for *FPACH* IE is set to "YES".

9.1.17:

- Correction to the reference of the *BCH Information* IE (this is a Transport Channel, not a Physical Channel).
- Font for *DwPCH Information* IE is now standard instead of bold.

9.1.18:

The *Common Measurement Object Type* IE is removed, only the choice remains. This correction is line with the way the Common Measurement Object Type is handled in the COMMON MEASUREMENT INITIATION RESPONSE and COMMON MEASUREMENT REPORT messages.

9.1.19:

Criticality of the "Cell" Choice Tag is corrected from "YES" to "-".

9.1.27.1:

Criticality of the *Secondary CPICH Information* IE is corrected from "YES" to "EACH".

9.1.32:

- *Indication Type* IE is removed, only the choice remains.
- Font for *DwPCH Information* IE is now standard instead of bold.

9.1.36.2:

The *UL SIR Target* IE is moved to the place of extensions in the tabular format (i.e. at the end of the *UL CCTrCH Information* IE).

9.1.42.1:

- The Criticality of the *DSCH To Modify* IE is corrected from "YES" to "EACH".
- The Criticality of the *DSCH To Delete* IE is corrected from "YES" to "EACH".

9.1.42.2:

- The *UL SIR Target* IE is moved to a place in the tabular format that is consistent with the ASN.1 encoding in the following IEs:
 - *UL CCTrCH To Add*,
 - *UL CCTrCH To Modify*.

9.1.51:

The presence of the *DL Reference Power Information* IE is corrected from "GLOBAL" to "EACH" to be in line with the ASN.1.

9.1.52:

- The *Dedicated Measurement Object Type* IE is removed, only the choice remains. This correction is line with the way the Dedicated Measurement Object Type is handled in the DEDICATED MEASUREMENT INITIATION RESPONSE and DEDICATED MEASUREMENT REPORT messages.
- The presence of the *PUSCH Information* IE is corrected from "EACH" to "GLOBAL" to be in line with the ASN.1.

9.1.53:

- The *PUSCH Information* IE is moved to the place of extensions in the tabular format (i.e. at the end of the *RL Information* IE).
- Criticality of the *PUSCH Information* IE is corrected from "EACH" to "GLOBAL".
- The presence of the *RL Set Information* IE has been corrected from "-" to

"EACH/ignore" to be in line with the ASN.1 specification.

9.1.55:

- The *PUSCH Information* IE is moved to the place of extensions in the tabular format (i.e. at the end of the *RL Information* IE).
- Criticality of the *PUSCH Information* IE is corrected from "EACH" to "GLOBAL".

9.1.58:

The Criticality of the *CCTrCH* choice tag is corrected from " " to "-".

9.1.59:

- Criticality of the *CCTrCH* choice tag is corrected from " " to "-".
- Criticality of the *RL Id* IE in the *CCTrCH* choice tag is corrected from " " to "-".

9.1.62:

- Criticality of the *DL Timeslot Information LCR* IE in *PDSCH To Add Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Criticality of the *DL Code Information LCR* IE in *PDSCH To Add Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Criticality of the *DL Timeslot Information LCR* IE in *PDSCH To Modify Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Criticality of the *Midamble Shift LCR* IE in *PDSCH To Modify Information LCR* IE is corrected from " " to "-".
- Maximum for the sequence in *DL Code Information LCR* IE in *PDSCH To Modify Information LCR* IE is corrected from "maxnoofPDSCHsLCR" to "maxnoofPDSCHs". (in line with the ASN.1 where there is no maxNrofPDSCHsLCR).
- Criticality of the *DL Code Information LCR* IE in *PDSCH To Modify Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Criticality of the *UL Timeslot Information LCR* IE in *PUSCH To Add Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Criticality of the *Midamble Shift LCR* IE in the *PUSCH To Add Information LCR* IE is corrected from " " to "-".
- Maximum for the sequence in *UL Code Information LCR* IE in *PUSCH To Add Information LCR* IE is corrected from "maxnoofPUSCHsLCR" to "maxnoofPUSCHs". (in line with the ASN.1 where there is no maxNrofPUSCHsLCR).
- Criticality of the *UL Code Information LCR* IE in *PUSCH To Add Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Maximum for the sequence in *UL Code Information* IE in *PUSCH To Modify Information* IE is corrected from "maxnoofPDSCHs" to "maxnoofPUSCHs".
- Criticality of the *UL Timeslot Information LCR* IE in *PUSCH To Modify Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Criticality of the *Midamble Shift LCR* IE in *PUSCH To Modify Information LCR* IE is corrected from " " to "-".
- Maximum for the sequence in *UL Code Information LCR* IE in *PUSCH To Modify Information LCR* IE is corrected from "maxnoofPDSCHsLCR" to "maxnoofPUSCHs". (the ASN.1 needs also to be corrected see comments on 9.3.3).
- Criticality of the *UL Code Information LCR* IE in *PUSCH To Modify Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- In the table defining the different maximum constants used:
 - maxnoofPDSCHsLCR is removed.
 - maxnoofPUSCHsLCR is removed.
 - maxnoofDLtsLCR is added.

9.1.64:

The Criticality of the *Cause* IE in *Unsuccessful DL Shared Channel Set* IE is corrected from "YES/ignore" to "-".

9.1.68:

Addition of the *Message Discriminator* IE.

9.1.69:

The *Information Exchange Object Type* IE is removed (consistent with

Measurement procedures).

9.1.84:

Criticality of *Message Type* IE changed to "reject" according to the ASN.1 (see § 9.3.2).

9.1.85:

Criticality of *Message Type* IE changed to "reject" according to the ASN.1 (see § 9.3.2).

9.1.86:

Criticality of *Message Type* IE changed to "reject" according to the ASN.1 (see § 9.3.2).

9.2.1.1A:

The explanation of the meaning of the values of the *Priority Level* IE is moved to the Semantics Description column.

9.2.1.6:

In the "Radio Network Layer Cause Meaning" table, the row for "Cell Synchronisation Adjustment not supported" is moved to its rightful place in the alphabetical order.

9.2.1.10:

This subclause on "Common Measurement Object Type" becomes "Void" according to the correction in 9.1.18.

9.2.1.12:

The tabular format is modified to introduce a "Criticality" and an "Assigned Criticality" column for the last 2 measurements that were introduced in an extension container and thus have a criticality (cf. in Rel-4) as well as provide a better representation of the use of the Extension solution for the Choices (see Issues to be solved on this topic).

9.2.1.17:

- The *DdMode* IE is reordered and made extensible according to the ASN.1 definition in 9.3.5.
- The tabular format is modified to introduce a "Criticality" and an "Assigned Criticality" column for the last 2 IEs that were introduced in an extension container and thus have a criticality (cf. late R99 corrections).

New 9.2.1.18A:

The tabular format introduced for the *CTFC* IE is in line with the ASN.1 definition in 9.3.5.

9.2.1.22:

This subclause on "Dedicated Measurement Object Type" becomes "Void" according to the correction in 9.1.52.

9.2.1.24:

The tabular format is modified to introduce a "Criticality" and an "Assigned Criticality" column for the last 2 measurements that were introduced in an extension container and thus have a criticality (cf. in Rel-4) as well as provide a better representation of the use of the Extension solution for the Choices (see Issues to be solved on this topic).

9.2.1.36:

This subclause on "Indication Type" becomes "Void" according to the correction in 9.1.32, 9.3.3 and 9.3.4).

9.2.1.36A:

This subclause on "Information Exchange Object Type" becomes "Void" according to the correction in 9.1.69.

9.2.1.36B:

The tabular format definition of the *Information Report Periodicity* IE is corrected to indicate that this is a CHOICE between INTEGER (1..60,...) and INTEGER (1..24,...).

9.2.1.39:

Definition is corrected from ENUMERATED to INTEGER (in line with the ASN.1).

9.2.1.40:

Definition is corrected from ENUMERATED to INTEGER (in line with the ASN.1).

9.2.1.40A:

This subclause on "Measurement Availability Indicator" becomes "Void" as this IE is not used anywhere in the specification.

New 9.2.1.40B:

The *Measurement Change Time* IE is defined as a CHOICE between INTEGER (1..6000,...) and nothing according to the ASN.1 definition in 9.3.5.

New 9.2.1.41A:

The *Measurement Hysteresis Time* IE is defined as a CHOICE between INTEGER (1..6000,...) and nothing according to the ASN.1 definition in 9.3.5.

9.2.1.44:

The tabular format is modified to introduce a "Criticality" and an "Assigned Criticality" column for the last 2 measurements that were introduced in an extension container and thus have a criticality (cf. in Rel-4).

9.2.1.45A:

The table has been corrected to remove the "Criticality" and "Assigned Criticality" columns to be in line with the ASN.1 definition (the IE is not defined by a ProtocolIE-Single-Container, but only as part of an extension to the Criticality Diagnostics IE).

9.2.1.46:

The *DdMode* IE is reordered and made extensible according to the ASN.1 definition in 9.3.5.

9.2.1.46A:

The ENUMERATED is corrected into an INTEGER according to the ASN.1 definition in 9.3.5.

9.2.1.49:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.1.49A:

The ENUMERATED is corrected into an INTEGER according to the ASN.1 definition in 9.3.5 (some text is added to the Semantics Description).

9.2.1.51:

- The tabular format definition of the *Report Periodicity* IE is changed to a reference to the newly introduced subclause 9.2.1.51a in order to present a definition in line with the ASN.1 definition (i.e. CHOICE between INTEGER (1..6000,...) and INTEGER (1..60,...), see 9.3.5).
- The tabular format definition of the *Measurement Hysteresis Time* IE is changed to a reference to the newly introduced subclause 9.2.1.41B in order to present a definition in line with the ASN.1 definition (i.e. CHOICE between INTEGER (1..6000,...) and nothing, see 9.3.5).
- The tabular format definition of the *Measurement Change Time* IE is changed to a reference to the newly introduced subclause 9.2.1.40A in order to present a definition in line with the ASN.1 definition (i.e. CHOICE between INTEGER (1..6000,...) and nothing, see 9.3.5).
- The tabular format is modified to introduce a "Criticality" and an "Assigned Criticality" column for the last Reporting Type that was introduced in an extension container and thus has a criticality (cf. in Rel-4) as well as provide a better representation of the use of the Extension solution for the Choices (see Issues to be solved on this topic).

New 9.2.1.51a:

The *Report Periodicity* IE is defined as a CHOICE between INTEGER (1..6000,...) and INTEGER (1..60,...) according to the ASN.1 definition in 9.3.5.

9.2.1.56A:

Alignment to the ASN.1 definition (Integer (0..255)).

9.2.1.58:

- The *CTFC* IE is encoded differently in the ASN.1 than by a mere INTEGER (0..MaxCTFC), this is aligned by replacing the definition by a reference to a new section 9.2.1.18A. Every piece of text related to this IE is moved to that section.
- Presence (M) of the "CHOICE Mode" is added.

9.2.1.62:

Tabular format structure is modified to be in line with the ASN.1 encoding.

9.2.2.16A:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.18C:

The ENUMERATED defining the *IP SpacingFDD* IE is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.22:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.24:

This section is voided as there is no corresponding IE defined in the tabular format in 9.2 or in the ASN.1 in 9.3.

9.2.2.25:

- The definition of the *DL Scrambling Code* IE is replaced by a reference to the subclause in which this IE is defined (9.2.2.13).
- The ENUMERATED defining the *Spreading Factor* IEs (4 different places in the *PDSCH Code Mapping* IE) is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.26:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.48:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.53B:

The name of the IE in the tabular format is aligned to the IE Name in the subclause title in 9.3.5.

9.2.3.4D:

Tabular format structure is modified to be in line with the ASN.1 encoding in 9.3.5: the IE is not defined using the ProtocolIE-Single-Container, so it has no Criticality in itself => the "Criticality" and the "Assigned Criticality" columns are removed.

9.2.3.4L:

Tabular format structure is modified to be in line with the ASN.1 encoding in 9.3.5.

9.2.3.5B:

Definition of the IE is corrected to be in line with the ASN.1 definition in 9.3.5. (INTEGER(-150,..400,...))

9.2.3.5E:

Definition of the IE is corrected to be in line with the ASN.1 definition in 9.3.5. (INTEGER(-150,..400,...))

9.2.3.7:

Tabular format structure is modified to be in line with the ASN.1 encoding in 9.3.5.

9.2.3.7A:

The ENUMERATED defining the *Midamble Allocation Mode* IE is made extensible according to the ASN.1 definition in 9.3.5.

9.2.3.9:

Definition of the IE is corrected to be in line with the ASN.1 definition in 9.3.5. (INTEGER(-150,..400,...)).

9.2.3.14:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.3.16:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.3.19A:

Tabular format structure is modified to be in line with the ASN.1 encoding in 9.3.5.

9.2.3.22a:

Tabular format structure is modified to be in line with the ASN.1 encoding in 9.3.5.

9.2.3.26:

A comment is added in the Semantics Description column, in line with the Comment in the ASN.1.

9.3.3:

- In the "Imports", the "IndicationType" is removed as it is not used anywhere in this part of the ASN.1. (see also correction in 9.1.32, 9.2.1.36 and 9.3.4).
- In COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST TDD message, the comment on the following IEs in the extension is corrected to reflect that these are LCR TDD IEs, not HCR TDD IEs:
 - id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD,
 - id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD,
 - id-PCH-Power-LCR-CTCH-ReconfRqstTDD.
- In COMMON MEASUREMENT INITIATION REQUEST message:
 - The comment on the "CommonMeasurementObjectType-CM-Rqst" is removed (in line with the correction in 9.1.18).
- In RESOURCE STATUS INDICATION message:
 - The comment on the "IndicationType-ResourceStatusInd" is removed (in line with the correction in 9.1.32).
- In RADIO LINK ADDITION REQUEST TDD message:
 - A comment is added to indicate that "uL-DPCH-Information" is "for 3.84Mcps TDD only" (consistent with tabular format).
- In RADIO LINK RECONFIGURATION PREPARE TDD message:
 - Addition of a comment to indicate that the USCH for TDD only.
- In DEDICATED MEASUREMENT INITIATION REQUEST message:
 - The comment on the "DedicatedMeasurementObjectType-CM-Rqst" is removed (in line with the correction in 9.1.52).
 - A comment is added to indicate that "RLS" and "AIIRLS" choices are "For FDD only".
 - A comment is added to indicated that "DPCH-Id" is "For TDD only".
- In DEDICATED MEASUREMENT INITIATION RESPONSE message:
 - A comment is added to indicate that "RLS" and "AIIRLS" choices are "For FDD only".
 - A comment is added to indicated that "DPCH-Id" is "For TDD only".
- In DEDICATED MEASUREMENT INITIATION RESPONSE message:
 - A comment is added to indicate that "RLS" and "AIIRLS" choices are "For FDD only".
 - A comment is added to indicated that "DPCH-Id" is "For TDD only".
- In PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message:
 - The comment "mandatory for 3.84Mcps TDD only" for "PUSCH-Information-AddList-PSCH-ReconfRqst" is moved.
 - The comment "mandatory for 3.84Mcps TDD only" for "PUSCH-Information-ModifyList-PSCH-ReconfRqst" is moved.
- In INFORMATION EXCHANGE INITIATION REQUEST message:
 - The comment on the "InformationExchangeObjectType-InfEx-Rqst" is removed (in line with the correction in 9.1.69)

9.3.4:

- Acknowledged-PCPCH-access-preambles:
 - A comment is added in line with the one in the tabular format.
- Acknowledged-PRACH-preambles-Value:
 - The comment is aligned on the one in the tabular format to remove text present in another specification (i.e. use of the referenced specification).
- CauseRadioNetwork:
 - "synchronisation-adjustment-not-supported" is corrected "cell-synchronisation-adjustment-not-supported" (editorial alignment on the tabular format).
- CommonTransportChannel-InformationResponse:
 - This IE and its definition are moved from the "R" section to the "C" section.
- Compressed-Mode-Deactivation-Flag:
 - The comment is removed as it does not have any meaning anymore.
- Detected-PCPCH-access-preambles:
 - A comment is added in line with the one in the tabular format.
- GPS-Information:
 - The comment including the condition for the presence of the GPS-Information is removed (see correction on InformationType).
- IndicationType:
 - This IE is removed as it is not used anywhere in the ASN.1. (see also correction in 9.1.32, 9.2.1.36 and 9.3.3).
- InformationType:
 - A comment is added including the condition for the presence of the GPS-Information.
- LimitedPowerIncrease:
 - This IE and its definition are moved from the "R" section to the "L" section.
- MessageStructure:
 - This IE and its definition are moved from the "C" section to the "M" section.
- MidambleShiftLCR:
 - A comment is added including the condition for the presence of the midambleShift IE.
- Rx-Timing-Deviation-Value:
 - A comment is added in line with the one in the tabular format.
- Rx-Timing-Deviation-Value-LCR:
 - A comment is added in line with the one in the tabular format.
- TFCS-TFCSList (in TFCS):
 - A comment is added in line with the condition in the tabular format.
- Transmitted-Carrier-Power-Value:
 - The references in the comment are updated from [4]/[5] to [22]/[23].
- Transmitted-Code-Power-Value:
 - The references in the comment are updated from [4]/[5] to [22]/[23].

Impact Analysis:

Impact assessment towards the previous version of the specification (same release): this CR has no impact on the previous version of the specification (same release) under either the protocol or functional point of view as the ASN.1 takes precedence on the tabular format and this CR merely aligns the tabular format on the ASN.1.

Consequences if not approved:

- ⌘ If this CR is not approved, then the discrepancy between the tabular format and the ASN.1 will remain.

Clauses affected:	⌘	All except cover page, 1, 2 and Annex D. This includes the introduction of new subclauses 9.2.1.18A, 9.2.1.40B, 9.2.1.41A, 9.2.1.51a.			
Other specs affected:	⌘	<input checked="" type="checkbox"/>	Other core specifications	⌘	TS 25.433 v 3.9.0 CR 668 TS 25.433 v 5.0.0 CR 670
		<input type="checkbox"/>	Test specifications		
		<input type="checkbox"/>	O&M Specifications		
Other comments:	⌘				

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. – In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TS 25.401: "UTRAN Overall Description".
- [2] 3GPP TS 25.426: "UTRAN Iur and Iub Interface Data Transport & Transport Signalling for DCH Data Streams".
- [3] CCITT Recommendation X.731 (01/92): "Information Technology – Open Systems Interconnection – Systems Management: State Management function".
- [4] 3GPP TS 25.215: "Physical layer – Measurements (FDD)".
- [5] 3GPP TS 25.225: "Physical layer – Measurements (TDD)".
- [6] 3GPP TS 25.430: "UTRAN Iub General Aspect and Principle".
- [7] 3GPP TS 25.211: "Physical channels and mapping of transport channels onto physical channels (FDD)".
- [8] 3GPP TS 25.212: "Multiplexing and channel coding (FDD)".
- [9] 3GPP TS 25.213: "Spreading and modulation (FDD)".
- [10] 3GPP TS 25.214: "Physical layer procedures (FDD)".
- [11] ITU-T Recommendation X.691, (12/97) "Information technology - ASN.1 encoding rules - Specification of Packed Encoding Rules (PER)".
- [12] ITU-T Recommendation X.680, (12/97) "Information Technology - Abstract Syntax Notation One (ASN.1):Specification of basic notation".
- [13] ITU-T Recommendation X.681, (12/97) "Information Technology - Abstract Syntax Notation One (ASN.1): Information object specification".
- [14] 3GPP TS 25.104: "UTRA (BS) FDD; Radio Transmission and Reception".
- [15] 3GPP TS 25.105: "UTRA (BS) TDD; Radio Transmission and Reception".
- [16] 3GPP TS 25.427: "UTRAN Iur/Iub Interface User Plane Protocol for DCH Data Stream".
- [17] 3GPP TS 25.402: "Synchronisation in UTRAN Stage2".
- [18] 3GPP TS 25.331: "RRC Protocol Specification".
- [19] 3GPP TS 25.221: "Physical channels and mapping of transport channels onto physical channels[TDD]".
- [20] 3GPP TS 25.223: "Spreading and modulation (TDD)".
- [21] 3GPP TS 25.224: "Physical Layer Procedures (TDD)".
- [22] 3GPP TS 25.133 (V3.3): "Requirements for support of Radio Resource management (FDD)".

- [23] 3GPP TS 25.123 (V4.0): “_Requirements for support of Radio Resource management (TDD)”_.
- [24] 3GPP TS 25.435: "UTRAN Iub Interface: User Plane Protocols for Common Transport Channel Data Streams".
- [25] 3GPP TS 25.302: "Services Provided by the Physical Layer".
- [26] 3GPP TR 25.921: "Guidelines and Principles for Protocol Description and Error Handling".
- [27] ICD-GPS-200: "Navstar GPS Space Segment/Navigation User Interface".
- [28] RTCM-SC104: "RTCM Recommended Standards for Differential GNSS Service (v.2.2)".

3 Definitions, sSymbols and aAbbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply.

CRNC Communication Context: The CRNC Communication Context contains the necessary information for the CRNC for communication with a specific UE. The CRNC Communication Context is identified by the CRNC Communication Context ID.

Elementary Procedure: The NBAP protocol consists of Elementary Procedures (EPs). An Elementary Procedure is a unit of interaction between the CRNC and the Node B.

An EP consists of an initiating message and possibly a response message.

Two kinds of EPs are used:

- **Class 1:** Elementary Procedures with response (success or failure).
- **Class 2:** Elementary Procedures without response.

For **Class 1** EPs, the types of responses can be as follows:

Successful

- A signalling message explicitly indicates that the elementary procedure has been successfully completed with the receipt of the response.

Unsuccessful

- A signalling message explicitly indicates that the EP failed.

Class 2 EPs are considered always successful.

Node B Communication Context: The Node B Communication Context contains the necessary information for the Node B for communication with a specific UE. The Node B Communication Context is created by the Radio Link Setup procedure and deleted by the Radio Link Deletion procedure when deleting the last Radio Link within the Node B Communication Context. The Node B Communication Context is identified by the Node B Communication Context ID.

Prepared Reconfiguration: A Prepared Reconfiguration exists when the Synchronised Radio Link Reconfiguration Preparation procedure has been completed successfully. The Prepared Reconfiguration does not exist any more after either of the procedures Synchronised Radio Link Reconfiguration Commit or Synchronised Radio Link Reconfiguration Cancellation has been completed.

3.2 Symbols

Void.

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

A-GPS	Assisted GPS
AICH	Acquisition Indicator Channel
AP-AICH	Access Preamble Acquisition Indicator Channel
ASN.1	Abstract Syntax Notation One
BCCCH	Broadcast Control Channel
CCPCH	Common Control Physical Channel
CFN	Connection Frame Number
CM	Compressed Mode
CPCH	Common Packet Channel
CPICH	Common Pilot Channel
CRNC	Controlling Radio Network Controller
CSICH	CPCH Status Indicator Channel
DCH	Dedicated Channel
DGPS	Differential GPS
DL	Downlink
DPCCH	Dedicated Physical Control Channel
DPCH	Dedicated Physical Channel
DPDCH	Dedicated Physical Data Channel
DSCH	Downlink Shared Channel
FACH	Forward Access Channel
FDD	Frequency Division Duplex
FP	Frame Protocol
GPS	Global Positioning System
IPDL	Idle Periods in the DownLink
ISCP	Interference Signal Code Power
L1	Layer 1
L2	Layer 2
MIB	Master Information Block
NBAP	Node B Application Part
O&M	Operation and Maintenance
PCCPCH	Primary Common Control Physical Channel
PCH	Paging Channel
PCPCH	Physical Common Packet Channel
PDSCH	Physical Downlink Shared Channel
PICH	Paging Indication Channel
PUSCH	Physical Uplink Shared Channel
RACH	Random Access Channel
RL	Radio Link
RLS	Radio Link Set
RNC	Radio Network Controller
RRC	Radio Resource Control
SB	Scheduling Block
SCCPCH	Secondary Common Control Physical Channel
SCH	Synchronisation Channel
SCTD	Space Code Transmit Diversity
SIB	System Information Block
SRNC	Serving Radio Network Controller
SSDT	Site Selection Diversity Transmission
STTD	Space Time Transmit Diversity
TDD	Time Division Duplex
TFC	Transport Format Combination
TFCI	Transport Format Combination Indicator
TFCS	Transport Format Combination Set
TFS	Transport Format Set
TPC	Transmit Power Control
TSTD	Time Switched Transmit Diversity
UARFCN	UTRA Absolute Radio Frequency Channel Number
UE	User Equipment

UL	Uplink
UMTS	Universal Mobile Telecommunications System
USCH	Uplink Shared Channel
UTRA	Universal Terrestrial Radio Access
UTRAN	Universal Terrestrial Radio Access Network

4 General

4.1 Procedure Specification Principles

The principle for specifying the procedure logic is to specify the functional behaviour of the Node B exactly and completely. The CRNC functional behaviour is left unspecified. The Reset procedure is an exception from this principle.

The following specification principles have been applied for the procedure text in subclause 8:

— The procedure text discriminates between:

1) Functionality which "shall" be executed

The procedure text indicates that the receiving node "shall" perform a certain function Y under a certain condition. If the receiving node supports procedure X but cannot perform functionality Y requested in the REQUEST message of a Class 1 EP, the receiving node shall respond with the message used to report unsuccessful outcome for this procedure, containing an appropriate cause value.

2) Functionality which "shall, if supported" be executed

The procedure text indicates that the receiving node "shall, if supported," perform a certain function Y under a certain condition. If the receiving node supports procedure X, but does not support functionality Y, the receiving node shall proceed with the execution of the EP, possibly informing the requesting node about the not supported functionality.

- Any required inclusion of an optional IE in a response message is explicitly indicated in the procedure text. If the procedure text does not explicitly indicate that an optional IE shall be included in a response message, the optional IE shall not be included.

4.2 Forwards and Backwards Compatibility

The forwards and backwards compatibility of the protocol is assured by a mechanism where all current and future messages, and IEs or groups of related IEs, include Id and criticality fields that are coded in a standard format that will not be changed in the future. These parts can always be decoded regardless of the standard version.

4.3 Specification Notations

For the purposes of the present document, the following notations apply:

[FDD] This tagging of a word indicates that the word preceding the tag "[FDD]" applies only to FDD. This tagging of a heading indicates that the heading preceding the tag "[FDD]" and the section following the heading applies only to FDD.

[TDD] This tagging of a word indicates that the word preceding the tag "[TDD]" applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[TDD]" and the section following the heading applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD.

[3.84Mcps TDD] This tagging of a word indicates that the word preceding the tag "[3.84Mcps TDD]" applies only to 3.84Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[3.84Mcps TDD]" and the section following the heading applies only to 3.84Mcps TDD.

- [1.28Mcps TDD] This tagging of a word indicates that the word preceding the tag "[1.28Mcps TDD]" applies only to 1.28Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[1.28Mcps TDD]" and the section following the heading applies only to 1.28Mcps TDD.
- [FDD - ...] This tagging indicates that the enclosed text following the "[FDD - " applies only to FDD. Multiple sequential paragraphs applying only to FDD are enclosed separately to enable insertion of TDD specific (or common) paragraphs between the FDD specific paragraphs.
- [TDD - ...] This tagging indicates that the enclosed text following the "[TDD - " applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD. Multiple sequential paragraphs applying only to TDD are enclosed separately to enable insertion of FDD specific (or common) paragraphs between the TDD specific paragraphs.
- [3.84Mcps TDD - ...] This tagging indicates that the enclosed text following the "[3.84Mcps TDD - " applies only to 3.84Mcps TDD. Multiple sequential paragraphs applying only to 1.28Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common) paragraphs between the 3.84Mcps TDD specific paragraphs.
- [1.28Mcps TDD - ...] This tagging indicates that the enclosed text following the "[1.28Mcps TDD - " applies only to 1.28Mcps TDD. Multiple sequential paragraphs applying only to 1.28Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common) paragraphs between the 1.28Mcps TDD specific paragraphs.
- Procedure When referring to an elementary procedure in the specification the Procedure Name is written with the first letters in each word in upper case characters followed by the word-_"procedure", e.g. Radio Link Setup procedure.
- Message When referring to a message in the specification the MESSAGE NAME is written with all letters in upper case characters followed by the word-_"message", e.g. RADIO LINK SETUP REQUEST message.
- IE When referring to an information element (IE) in the specification the *Information Element Name* is written with the first letters in each word in upper case characters and all letters in Italic font followed by the abbreviation-_"IE", e.g. *Transport Format Set IE*.
- Value of an IE When referring to the value of an information element (IE) in the specification the "Value" is written as it is specified in subclause 9.2 enclosed by quotation marks, e.g. "Abstract Syntax Error (Reject)" or "SSDT Active in the UE".

5 NBAP Services

5.1 Parallel Transactions

Unless explicitly indicated in the procedure description, at any instance in time one protocol peer shall have a maximum of one ongoing dedicated NBAP procedure related to a certain Node B eC_{ommunication} eC_{ontext}.

6 Services Expected from Signalling Transport

NBAP requires an assured in-sequence delivery service from the signalling bearer, and notification if the assured in-sequence delivery service is no longer available.

7 Functions of NBAP

The NBAP protocol provides the following functions:

- Cell Configuration Management. This function gives the CRNC the possibility to manage the cell configuration information in a Node B.
- Common Transport Channel Management. This function gives the CRNC the possibility to manage the configuration of Common Transport Channels in a Node B.
- System Information Management. This function gives the CRNC the ability to manage the scheduling of System Information to be broadcast in a cell.
- Resource Event Management. This function gives the Node B the ability to inform the CRNC about the status of Node B resources.
- Configuration Alignment. This function gives the CRNC and the Node B the possibility to verify and enforce that both nodes have the same information on the configuration of the radio resources.
- Measurements on Common Resources. This function allows the CRNC to initiate measurements **on common resources** in the Node B. The function also allows the Node B to report the result of the measurements.
- Radio Link Management. This function allows the CRNC to manage radio links using dedicated resources in a Node B.
- Radio Link Supervision. This function allows the CRNC to report failures and restorations of a Radio Link.
- Compressed Mode Control [FDD]. This function allows the CRNC to control the usage of compressed mode in a Node B.
- Measurements on Dedicated Resources. This function allows the CRNC to initiate measurements **on dedicated resources** in the Node B. The function also allows the Node B to report the result of the measurements.
- DL Power Drifting Correction [FDD]. This function allows the CRNC to adjust the DL power level of one or more Radio Links in order to avoid DL power drifting between the Radio Links.
- Reporting of General Error Situations. This function allows reporting of general error situations, for which function specific error messages have not been defined.
- Physical Shared Channel Management [TDD]. This function allows the CRNC to manage physical resources in the Node B belonging to Shared Channels (USCH/DSCH).
- DL Power Timeslot Correction [TDD]. This function enables the Node B to apply an individual offset to the transmission power in each timeslot according to the downlink interference level at the UE.
- Cell Synchronisation [TDD]. This function allows the synchronisation of cells or Node Bs via the air interface.
- Information Exchange. This function allows the CRNC to initiate information provision from the Node B. The function also allows the Node B to report the requested information.

The mapping between the above functions and NBAP elementary procedures is shown in the table below.

Table 1: Mapping between functions and NBAP elementary procedures

Function	Elementary Procedure(s)
Cell Configuration Management	a) Cell Setup b) Cell Reconfiguration c) Cell Deletion
Common Transport Channel Management	a) Common Transport Channel Setup b) Common Transport Channel Reconfiguration c) Common Transport Channel Deletion
System Information Management	System Information Update
Resource Event Management	a) Block Resource b) Unblock Resource c) Resource Status Indication
Configuration Alignment	a) Audit Required b) Audit c) Reset
Measurements on Common Resources	a) Common Measurement Initiation b) Common Measurement Reporting c) Common Measurement Termination d) Common Measurement Failure
Radio Link Management.	a) Radio Link Setup b) Radio Link Addition c) Radio Link Deletion d) Unsynchronised Radio Link Reconfiguration e) Synchronised Radio Link Reconfiguration Preparation f) Synchronised Radio Link Reconfiguration Commit g) Synchronised Radio Link Reconfiguration Cancellation h) Radio Link Pre-emption
Radio Link Supervision.	a) Radio Link Failure b) Radio Link Restoration
Compressed Mode Control [FDD]	a) Radio Link Setup b) Radio Link Addition c) Compressed Mode Command d) Unsynchronised Radio Link Reconfiguration e) Synchronised Radio Link Reconfiguration Preparation f) Synchronised Radio Link Reconfiguration Commit g) Synchronised Radio Link Reconfiguration Cancellation
Measurements on Dedicated Resources	a) Dedicated Measurement Initiation b) Dedicated Measurement Reporting c) Dedicated Measurement Termination d) Dedicated Measurement Failure
DL Power Drifting Correction [FDD]	Downlink Power Control
Reporting of General Error Situations	Error Indication
Physical Shared Channel Management [TDD]	Physical Shared Channel Reconfiguration
DL Power Timeslot Correction [TDD]	Downlink Power Timeslot Control
Cell Synchronisation [TDD]	a) Cell Synchronisation Initiation b) Cell Synchronisation Reconfiguration c) Cell Synchronisation Reporting d) Cell Synchronisation Termination e) Cell Synchronisation Failure f) Cell Synchronisation Adjustment
Information Exchange	a) Information Exchange Initiation b) Information Reporting c) Information Exchange Termination d) Information Exchange Failure

8 NBAP Procedures

8.1 Elementary Procedures

NBAP procedures are divided into common procedures and dedicated procedures.

- NBAP common procedures are procedures that request initiation of a **UE-Node B Communication eC**ontext for a specific UE in Node B or are not related to a specific UE. NBAP common procedures also incorporate logical O&M [1] procedures.
- NBAP dedicated procedures are procedures that are related to a specific **UE-Node B Communication eC**ontext in Node B. This **UE-Node B Communication eC**ontext is identified by a **UE-Node B Communication eC**ontext identity.

The two types of procedures may be carried on separate signalling links.

In the following tables, all EPs are divided into Class 1 and Class 2 EPs:

Table 2: Class 1

Elementary Procedure	Message	Successful Outcome	Unsuccessful Outcome
		Response message	Response message
Cell Setup	CELL SETUP REQUEST	CELL SETUP RESPONSE	CELL SETUP FAILURE
Cell Reconfiguration	CELL RECONFIGURATION REQUEST	CELL RECONFIGURATION RESPONSE	CELL RECONFIGURATION FAILURE
Cell Deletion	CELL DELETION REQUEST	CELL DELETION RESPONSE	
Common Transport Channel Setup	COMMON TRANSPORT CHANNEL SETUP REQUEST	COMMON TRANSPORT CHANNEL SETUP RESPONSE	COMMON TRANSPORT CHANNEL SETUP FAILURE
Common Transport Channel Reconfiguration	COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST	COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE	COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE
Common Transport Channel Deletion	COMMON TRANSPORT CHANNEL DELETION REQUEST	COMMON TRANSPORT CHANNEL DELETION RESPONSE	
Physical Shared Channel Reconfigure [TDD]	PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST	PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE	PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE
Audit	AUDIT REQUEST	AUDIT RESPONSE	AUDIT FAILURE
Block Resource	BLOCK RESOURCE REQUEST	BLOCK RESOURCE RESPONSE	BLOCK RESOURCE FAILURE
Radio Link Setup	RADIO LINK SETUP REQUEST	RADIO LINK SETUP RESPONSE	RADIO LINK SETUP FAILURE
System Information Update	SYSTEM INFORMATION UPDATE REQUEST	SYSTEM INFORMATION UPDATE RESPONSE	SYSTEM INFORMATION UPDATE FAILURE
Common Measurement Initiation	COMMON MEASUREMENT INITIATION REQUEST	COMMON MEASUREMENT INITIATION RESPONSE	COMMON MEASUREMENT INITIATION FAILURE
Radio Link Addition	RADIO LINK ADDITION REQUEST	RADIO LINK ADDITION RESPONSE	RADIO LINK ADDITION FAILURE
Radio Link Deletion	RADIO LINK DELETION REQUEST	RADIO LINK DELETION RESPONSE	
Synchronised Radio Link Reconfiguration Preparation	RADIO LINK RECONFIGURATION PREPARE	RADIO LINK RECONFIGURATION READY	RADIO LINK RECONFIGURATION FAILURE
Unsynchronised Radio Link Reconfiguration	RADIO LINK RECONFIGURATION REQUEST	RADIO LINK RECONFIGURATION RESPONSE	RADIO LINK RECONFIGURATION FAILURE
Dedicated Measurement Initiation	DEDICATED MEASUREMENT INITIATION REQUEST	DEDICATED MEASUREMENT INITIATION RESPONSE	DEDICATED MEASUREMENT INITIATION FAILURE
Reset	RESET REQUEST	RESET RESPONSE	
Cell Synchronisation Initiation [TDD]	CELL SYNCHRONISATION INITIATION REQUEST	CELL SYNCHRONISATION INITIATION RESPONSE	CELL SYNCHRONISATION INITIATION FAILURE
Cell Synchronisation Reconfiguration [TDD]	CELL SYNCHRONISATION RECONFIGURATION REQUEST	CELL SYNCHRONISATION RECONFIGURATION RESPONSE	CELL SYNCHRONISATION RECONFIGURATION FAILURE
Cell Synchronisation Adjustment [TDD]	CELL SYNCHRONISATION ADJUSTMENT REQUEST	CELL SYNCHRONISATION ADJUSTMENT RESPONSE	CELL SYNCHRONISATION ADJUSTMENT FAILURE
Information Exchange Initiation	INFORMATION EXCHANGE INITIATION REQUEST	INFORMATION EXCHANGE INITIATION RESPONSE	INFORMATION EXCHANGE INITIATION FAILURE

Table 3: Class 2

Elementary Procedure	Message
Resource Status Indication	RESOURCE STATUS INDICATION
Audit Required	AUDIT REQUIRED INDICATION
Common Measurement Reporting	COMMON MEASUREMENT REPORT
Common Measurement Termination	COMMON MEASUREMENT TERMINATION REQUEST
Common Measurement Failure	COMMON MEASUREMENT FAILURE INDICATION
Synchronised Radio Link Reconfiguration Commit	RADIO LINK RECONFIGURATION COMMIT
Synchronised Radio Link Reconfiguration Cancellation	RADIO LINK RECONFIGURATION CANCELLATION
Radio Link Failure	RADIO LINK FAILURE INDICATION
Radio Link Restoration	RADIO LINK RESTORE INDICATION
Dedicated Measurement Reporting	DEDICATED MEASUREMENT REPORT
Dedicated Measurement Termination	DEDICATED MEASUREMENT TERMINATION REQUEST
Dedicated Measurement Failure	DEDICATED MEASUREMENT FAILURE INDICATION
Downlink Power Control [FDD]	DL POWER CONTROL REQUEST
Compressed Mode Command [FDD]	COMPRESSED MODE COMMAND
Unblock Resource	UNBLOCK RESOURCE INDICATION
Error Indication	ERROR INDICATION
Downlink Power Timeslot Control [TDD]	DL POWER TIMESLOT CONTROL REQUEST
Radio Link Pre-emption	RADIO LINK PREEMPTION REQUIRED INDICATION
Cell Synchronisation Reporting [TDD]	CELL SYNCHRONISATION REPORT
Cell Synchronisation Termination [TDD]	CELL SYNCHRONISATION TERMINATION REQUEST
Cell Synchronisation Failure [TDD]	CELL SYNCHRONISATION FAILURE INDICATION
Information Reporting	INFORMATION REPORT
Information Exchange Termination	INFORMATION EXCHANGE TERMINATION REQUEST
Information Exchange Failure	INFORMATION EXCHANGE FAILURE INDICATION

8.2 NBAP Common Procedures

8.2.1 Common Transport Channel Setup

8.2.1.1 General

This procedure is used for establishing the necessary resources in Node B, regarding Secondary CCPCH, PICH, PRACH, PCPCH [FDD], AICH [FDD], AP_AICH [FDD], CD/CA-ICH [FDD], FACH, PCH, RACH, FPACH[1.28Mcps TDD] and CPCH [FDD].

8.2.1.2 Successful Operation

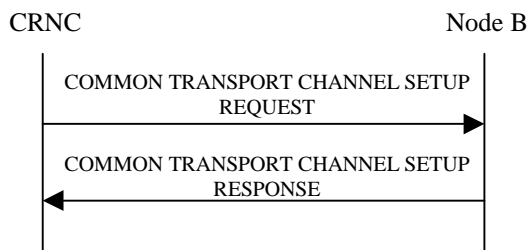


Figure 1: Common Transport Channel Setup procedure, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL SETUP REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

One message can configure only one of the following combinations:

- [FDD - one Secondary CCPCH, and FACHs, PCH and PICH related to that Secondary CCPCH], or
- [TDD - one CCTrCH consisting of Secondary CCPCHs and FACHes, PCH with the corresponding PICH related to that group of Secondary CCPCHs], or
- one [1.28Mcps TDD – or more] PRACH, one RACH and one AICH [FDD] and one FPACH[1.28Mcps TDD] related to that PRACH.
- [FDD-PCPCHs, one CPCH, one AP_AICH and one CD/CA-ICH related to that group of PCPCHs.]

Secondary CCPCH:

—[FDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the Secondary CCPCH IEa-Secondary CCPCH, the Node B shall configure and activate the indicated Secondary CCPCH it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.]

[TDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the Secondary CCPCH IEone or more Secondary CCPCHs, the Node B shall configure and activate the indicated Secondary CCPCH(s) them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.]

[TDD_- FACHs and PCH may be mapped onto a CCTrCH which may consist of several Secondary CCPCHs]

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the FACH Parameters IEone or several FACHs, the Node B shall configure and activate the indicated FACH(s) them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the PCH Parameters IEa-PCH and a PICH, the Node B shall configure and activate the concerned PCH and the associated PICH them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

PRACH:

—When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the PRACH IEa-PRACH, the Node B shall configure and activate it-the indicated PRACH and the associated RACH [FDD – and the associated AICH] according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[1.28Mcps TDD – FPACH]:

—If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the FPACH IEa-FPACH, the Node B shall configure and activate the indicated FPACH it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[FDD-PCPCHs]:

—When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the CPCH Parameters IEPCPCHs, the Node B shall configure and activate the indicated CPCH and the associated PCPCH(s), AP-AICH and CD/CA-ICH it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

—If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *CD Signatures* IE, the Node B may use only the given CD signatures on CD/CA-ICH.

—If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *Channel Request Parameters* IE, the Node B shall use the parameters to distinguish the PCPCHs.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *AP Sub Channel Number* IE in *Channel Request Parameters* IE, the Node B shall use AP sub channel number to distinguish the PCPCHs.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *AP Sub Channel Number* IE in *SF Request Parameters* IE, the Node B shall use AP sub channel number to distinguish the requested Spreading Factors.

General:

After successfully configuring the requested common transport channels and the common physical channels, the Node B shall store the value of *Configuration Generation ID* IE and it shall respond with the COMMON TRANSPORT CHANNEL SETUP RESPONSE message with the *Common Transport Channel ID* IE, the *Binding ID* IE and the *Transport Layer Address* IE for the configured common transport channels.

After a successful procedure and once the transport bearers are established, the configured common transport channels and the common physical channels shall adopt the state Enabled [6] in the Node B and the common physical channels exist on the Uu interface.

8.2.1.3 Unsuccessful Operation

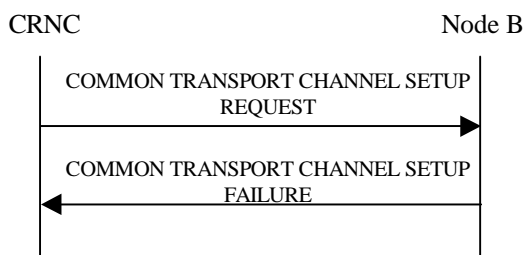


Figure 2: Common Transport Channel Setup procedure, Unsuccessful Operation

If the Node B is not able to support all or part of the configuration, it shall reject the configuration of all the channels in the COMMON TRANSPORT CHANNEL SETUP REQUEST message. The channels in the COMMON TRANSPORT CHANNEL SETUP REQUEST message shall remain in the same state as prior to the procedure. The *Cause* IE shall be set to an appropriate value. The value of *Configuration Generation ID* IE from the COMMON TRANSPORT CHANNEL SETUP REQUEST message shall not be stored.

If the configuration was unsuccessful, the Node B shall respond with a COMMON TRANSPORT CHANNEL SETUP FAILURE message.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell not available
- Power level not supported
- Node B Resources unavailable
- Requested Tx Diversity Mode not supported
- UL SF not supported
- DL SF not supported
- Common Transport Channel Type not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.1.4 Abnormal Conditions

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Secondary CCPCH* IE, and that IE contains—[FDD – neither the *FACH Parameters* IE nor the *PCH Parameters* IE] [TDD – neither the *FACH* IE nor the *PCH* IE], the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.

[FDD – If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *CD Sub Channel Numbers* IE, but the *CD Signatures* IE is not present, then the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.]

[TDD — If the *FACH CCTrCH id* IE or the *PCH CCTrCH id* IE does not equal the *SCCPCH CCTrCH id* IE, the Node B shall regard the Common Transport Channel Setup procedure as having failed and the Node B shall send the COMMON TRANSPORT CHANNEL SETUP FAILURE message to the CRNC.]

[TDD — If the *TDD Physical Channel Offset* IE, the *Repetition Period* IE, and the *Repetition Length* IE are not equal for each SCCPCH configured within the CCTrCH, the Node B shall regard the Common Transport Channel Setup procedure as having failed and the Node B shall send the COMMON TRANSPORT CHANNEL SETUP FAILURE message to the CRNC.]

If the state is already Enabled or Disabled [6] for at least one channel in the COMMON TRANSPORT CHANNEL SETUP REQUEST message which is received, the Node B shall reject the configuration of all channels with the *Cause* IE set to "Message not compatible with receiver state".

8.2.2 Common Transport Channel Reconfiguration

8.2.2.1 General

This procedure is used for reconfiguring common transport channels and/or common physical channels, while they still might be in operation.

8.2.2.2 Successful Operation

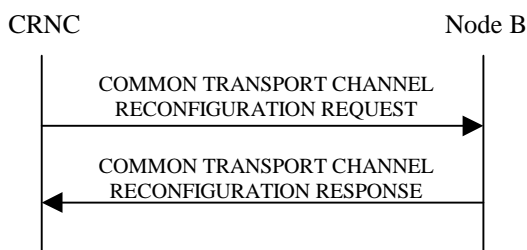


Figure 3: Common Transport Channel Reconfiguration, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

One message can configure only one of the following combinations:

- [FDD – FACHs, one PCH and/or one PICH related to one Secondary CCPCH], or

- [TDD – one CCTrCH consisting of Secondary CCPCHs and FACHs, PCH with the corresponding PICH related to that group of Secondary CCPCHs], or
- one RACH and/or one AICH[FDD])] and/or one FPACH[1.28Mcps TDD] related to one PRACH, or
- [FDD – one CPCH and/or one AP-AICH and/or one CD/CA-ICH related to one CPCH].

~~TDD~~–SCCPCH:

—[TDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *SCCPCH Power* IE, the Node B shall reconfigure the power that the indicated S-CCPCH shall use.]

FACH:

—~~If the FACH Parameters IE is~~ When one or several FACHs are present, the Node B shall reconfigure the indicated FACH(s).

[FDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Max FACH Power* IE, the Node B shall reconfigure the maximum power that the indicated FACH may use.]

[1.28Mcps TDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Max FACH Power* IE, the Node B shall reconfigure the maximum power that the indicated FACH may use.]

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWS* IE, the Node B shall reconfigure the time of arrival window startpoint that the indicated FACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWE* IE, the Node B shall reconfigure the time of arrival window endpoint that the indicated FACH shall use.

PCH:

—~~If the PCH Parameters IE~~ When the PCH is present, the Node B shall reconfigure the indicated PCH.

[FDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *PCH Power* IE, the Node B shall reconfigure the power that the PCH shall use.]

[1.28Mcps TDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *PCH Power* IE, the Node B shall reconfigure the power that the PCH shall use.]

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWS* IE, the Node B shall reconfigure the time of arrival window startpoint that the PCH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWE* IE, the Node B shall reconfigure the time of arrival window endpoint that the PCH shall use.

PICH:

~~If the PICH Parameters IE~~ When a PICH is present, the Node B shall reconfigure the indicated PICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *PICH Power* IE, the Node B shall reconfigure the power that the PICH shall use.

[FDD – PRACH]:

—~~If the PRACH Parameters IE~~ When a PRACH is present, the Node B shall reconfigure the indicated PRACH(s).

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the ~~Preamble Signatures IE~~ Allowed Preamble Signatures Information, the Node B shall reconfigure the preamble signatures that the indicated PRACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the ~~Allowed Slot Format Information IE~~ Allowed Slot Format Information, the Node B shall reconfigure the slot formats that the indicated PRACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the ~~RACH Sub Channel Numbers IE~~ Allowed Sub Channel Information, the Node B shall reconfigure the sub channel numbers that the indicated PRACH shall use.

[FDD – AICH]:

— **If the AICH Parameters IE When a AICH** is present, **the** Node B shall reconfigure the indicated AICH(s).

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *AICH Power IE*, the Node B shall reconfigure the power that the **indicated** AICH shall use.

[FDD – CPCH]:

— **If the CPCH Parameters IE When a CPCH** is present, **the** Node B shall reconfigure the indicated CPCH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes **the UL SIR IEUL SIR Information**, the Node B shall reconfigure the UL SIR for the UL power control for the **indicated** CPCH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes **the Initial DL Transmission Power IEInitial DL transmission Power Information**, the Node B shall reconfigure the Initial DL **Transmission Power** for the **indicated** CPCH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes **the Maximum DL Power IEMaximum DL Power Information**, the Node B shall apply this value to the new configuration **of the indicated CPCH** and never transmit with a higher power on any DL PCPCHs once the new configuration is being used.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes **the Minimum DL Power IEMinimum DL Power Information**, the Node B shall apply this value to the new configuration **of the indicated CPCH** and never transmit with a lower power on any DL PCPCHs once the new configuration is being used.

[FDD – AP-AICH]:

— **If the AP-AICH Parameters IE When a AP-AICH** is present, **the** Node B shall reconfigure the indicated AP-AICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *AP-AICH Power IE*, the Node B shall reconfigure the power that the AP-AICH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *CSICH Power IE*, the Node B shall reconfigure the power that the CSICH shall use.

[FDD-CD/CA-ICH]:

If the CD/CA-ICH Parameters IE When a CD/CA-ICH is present, **the** Node B shall reconfigure the indicated CD/CA-ICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *CD/CA-AICH Power IE*, the Node B shall reconfigure the power that the CD/CA-AICH shall use.

[1.28Mcps TDD - FPACH]:

If the FPACH is included, the Node B shall reconfigure the indicated FPACH.

— If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Max FPACH Power IE*, the Node B shall reconfigure the power that the FPACH shall use.

General:

After a successful procedure, the channels will have adopted the new configuration in **the** Node B. The channels in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message shall remain in the same state as prior to the procedure. **The** Node B shall store the value of *Configuration Generation ID IE_r*, and the Node B shall respond with the COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE message.

8.2.2.3 Unsuccessful Operation

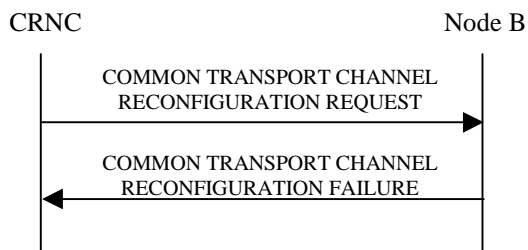


Figure 4: Common Transport Channel Reconfiguration procedure, Unsuccessful Operation

If the Node B is not able to support all or parts of the configuration, it shall reject the configuration of all the channels in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message. The channels in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message shall remain in the same state as prior to the procedure. The *Cause* IE shall be set to an appropriate value. The value of *Configuration Generation ID* IE from the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message shall not be stored.

If the configuration was unsuccessful, the Node B shall respond with the COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE message.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell not available
- Power level not supported
- Node B Resources unavailable

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.2.4 Abnormal Conditions

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8.2.3 Common Transport Channel Deletion

8.2.3.1 General

This procedure is used for deleting common physical channels and common transport channels.

8.2.3.2 Successful Operation

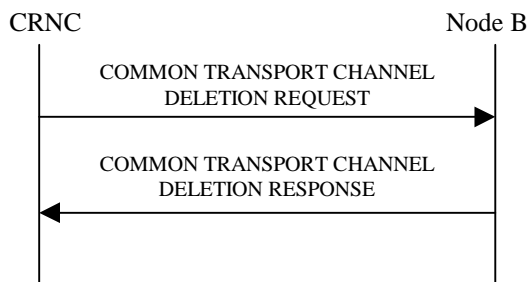


Figure 5: Common Transport Channel Deletion procedure, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL DELETION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Secondary CCPCH:

— When-If the Common Physical Channel ID IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates contains a Secondary CCPCH, the Node B shall delete the indicated channel and the FACHs and PCH supported by that Secondary CCPCH. If there is a PCH that is deleted, the PICH associated with that PCH shall also be deleted.

PRACH:

— When-If the Common Physical Channel ID IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates contains a PRACH, the Node B shall delete the indicated channel and the RACH supported by the PRACH. [FDD - The AICH associated with the RACH shall also be deleted.]

[FDD – PCPCHes]:

— When-If the Common Physical Channel ID IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates contains one of the PCPCHes for a CPCH, the Node B shall delete all PCPCHs associated with the indicated channel and the CPCH supported by these PCPCHes. The AP-AICH and CD/CA-ICH associated with the CPCH shall also be deleted.

General:

[TDD – If the requested common physical channel is a part of a CCTrCH, all common transport channels and all common physical channels associated with this CCTrCH shall be deleted.]

After a successful procedure, the channels are deleted in the Node B. The channels in the COMMON TRANSPORT CHANNEL DELETION REQUEST message shall be set to state Not Existing ref. [6]. The Node B shall store the received value of the *Configuration Generation ID* IE, and respond with the COMMON TRANSPORT CHANNEL DELETION RESPONSE message.

8.2.3.3 Unsuccessful Operation

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8.2.3.4 Abnormal Conditions

If the C-ID in the COMMON TRANSPORT CHANNEL DELETION REQUEST message is not existing in the Node B or the Common Physical Channel ID does not exist in the Cell, the Node B shall respond with the COMMON TRANSPORT CHANNEL DELETION RESPONSE message.

8.2.4 Block Resource

8.2.4.1 General

The Node B initiates this procedure to request the CRNC to prohibit the usage of the specified logical resources.

The logical resource that can be blocked is a cell.

8.2.4.2 Successful Operation

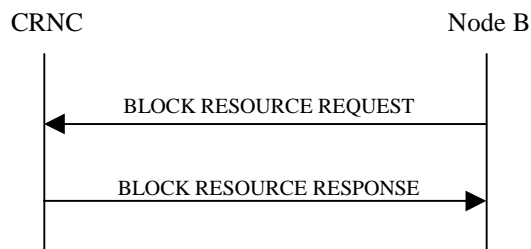


Figure 6: Block Resource procedure, Successful Operation

The procedure is initiated with a BLOCK RESOURCE REQUEST message sent from the Node B to the CRNC **using the Node B Control Port**.

Upon reception of the BLOCK RESOURCE REQUEST message, the CRNC shall prohibit the use of the indicated logical resources according to the *Blocking Priority Indicator IE*.

If the *Blocking Priority Indicator IE* in the BLOCK RESOURCE REQUEST message indicates "*High Priority*", the CRNC shall prohibit the use of the logical resources immediately.

The BLOCK RESOURCE REQUEST message shall include the Shutdown Timer IE when If the *Blocking Priority Indicator IE* **in the message** indicates "*Normal Priority*". **If** the CRNC shall prohibit the use of the logical resources if the resources are idle or immediately upon expiry of the shutdown timer specified **by the Shutdown Timer IE** in the **BLOCK RESOURCE REQUEST** message. **New traffic shall not be allowed to use the logical resources while the CRNC waits for the resources to become idle and once the resources are blocked.**

If the *Blocking Priority Indicator IE* in the BLOCK RESOURCE REQUEST message indicates "*Low Priority*", the CRNC shall prohibit the use of the logical resources when the resources become idle. New traffic shall not be allowed to use the logical resources while the CRNC waits for the resources to become idle and once the resources are blocked.

If the resources are successfully blocked, the CRNC shall respond with a BLOCK RESOURCE RESPONSE message. Upon reception of the BLOCK RESOURCE RESPONSE message, the Node B may disable [3.84Mcps TDD - SCH], [FDD - the Primary SCH, the Secondary SCH, the Primary CPICH, if present the Secondary CPICH(s)], [1.28Mcps TDD - DwPCH] and the Primary CCPCH. The other logical resources in the cell shall be considered as blocked.

Reconfiguration of logical resources and change of System Information can be done, even when the logical resources are blocked.

Interactions with the Unblock Resource procedure:

If the UNBLOCK RESOURCE INDICATION message is received by the CRNC while a Block Resource procedure on the same logical resources is in progress, the CRNC shall cancel the Block Resource procedure and proceed with the Unblock Resource procedure.

If the BLOCK RESOURCE RESPONSE message or the BLOCK RESOURCE FAILURE message is received by the Node B after the Node B has initiated an Unblock Resource procedure on the same logical resources as the ongoing Block Resource procedure, the Node B shall ignore the response to the Block Resource procedure.

8.2.4.3 Unsuccessful Operation

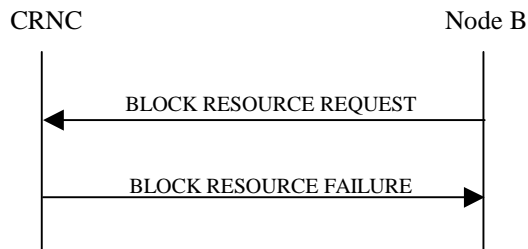


Figure 7: Block Resource procedure, Unsuccessful Operation

The CRNC may reject the request to block the logical resources, in which case the logical resources will remain unaffected and the CRNC shall respond to the Node B with the BLOCK RESOURCE FAILURE message. Upon reception of the BLOCK RESOURCE FAILURE message, the Node B shall leave the logical resources in the state that they were in prior to the start of the Block Resource procedure.

Typical cause values are as follows:

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

Radio Network Layer Cause

- Priority transport channel established

8.2.4.4 Abnormal Conditions

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8.2.5 Unblock Resource

8.2.5.1 General

The Node B initiates this procedure to indicate to the CRNC that logical resources are now unblocked.

The logical resource that can be unblocked is a cell.

8.2.5.2 Successful Operation

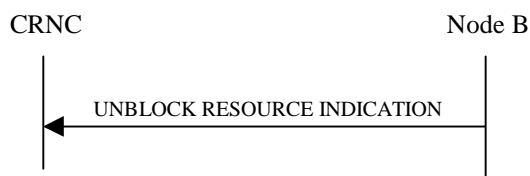


Figure 8: Unblock Resource procedure, Successful Operation

The procedure is initiated with an UNBLOCK RESOURCE INDICATION message sent from the Node B to the CRNC using the Node B Control Port. The Node B shall enable [TDD - SCH], [FDD - the Primary SCH, the Secondary SCH, the Primary CPICH, the Secondary CPICH(s) (if present)], [1.28Mcps TDD – DwPCH] and the Primary CCPCH that had been disabled due to the preceding Block Resource procedure before sending the UNBLOCK RESOURCE

INDICATION message. Upon reception of the UNBLOCK RESOURCE INDICATION message, the CRNC may permit the use of the logical resources.

When the logical resource indicated is a cell, all associated physical channels and transport channels associated to the cell that is unblocked are also unblocked.

8.2.5.3 Abnormal Conditions

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8.2.6 Audit Required

8.2.6.1 General

The Node B initiates this procedure to request the CRNC to perform an audit of the logical resources at the Node B. This procedure is used to indicate a possible misalignment of state or configuration information.

8.2.6.2 Successful Operation

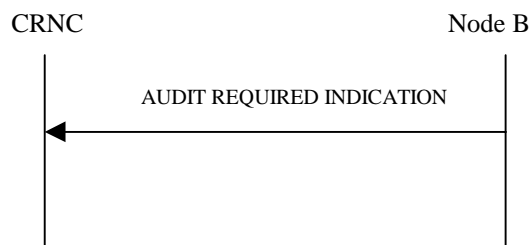


Figure 9: Audit Required procedure, Successful Operation

The procedure is initiated with an AUDIT REQUIRED INDICATION message sent from the Node B to the CRNC using the Node B Control Port.

If the Node B cannot ensure alignment of the state or configuration information, it should initiate the Audit Required procedure.

Upon receipt of the AUDIT REQUIRED INDICATION message, the CRNC should initiate the Audit procedure.

8.2.6.3 Abnormal Conditions

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8.2.7 Audit

8.2.7.1 General

This procedure is executed by the CRNC to perform an audit of the configuration and status of the logical resources in the Node B. A complete audit of a Node B is performed by one or more Audit procedures, together performing an audit sequence. The audit may cause the CRNC to re-synchronise the Node B to the status of logical resources known by the CRNC, that the Node B can support.

8.2.7.2 Successful Operation

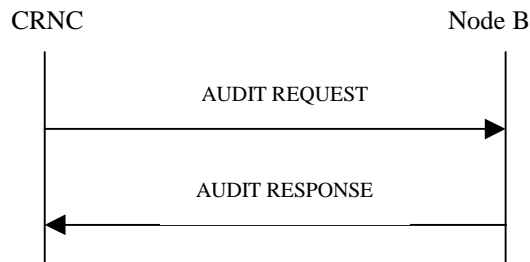


Figure 10: Audit procedure, Successful Operation

The procedure is initiated with an AUDIT REQUEST message sent from the CRNC to the Node B **using the Node B Control Port**.

If the *Start of Audit Sequence* IE in the AUDIT REQUEST message is set to `"start of audit sequence"` a new audit sequence is started, any ongoing audit sequence shall be aborted and the Node B shall provide (part of the) audit information. If the *Start of Audit Sequence* IE is set to `"not start of audit sequence"`, the Node B shall provide (part of) the remaining audit information not already provided during this audit sequence.

If the information provided in the AUDIT RESPONSE message completes the audit sequence, the Node B shall set the *End Of AuditSequence Indicator* IE in the AUDIT RESPONSE message to `"End of Audit Sequence"`. If not all audit information has been provided yet as part of the ongoing audit sequence, the Node B shall set the *End Of AuditSequence Indicator* IE in the AUDIT RESPONSE message to `"Not End of Audit Sequence"`.

Information Provided In One Audit Sequence.

The Node B shall include one *Local Cell Information* IE for each local cell present in the Node B. The Node B shall include the *Maximum DL Power Capability* IE and the *Minimum DL Power Capability* IE when any of those values are known by the Node B.

[TDD - The Node B shall include the *Reference Clock availability* IE to indicate the availability of a Reference clock connected to the Local eCell.]

If the Node B internal resources are pooled for a group of cells, the Node B shall include one *Local Cell Group Information* IE containing the Node B internal resource capacity and the consumption laws per group of cells. If the *UL Capacity Credit* IE is not present, then the internal resource capabilities of the Node B are modelled as shared resources between Uplink and Downlink.

The Node B shall include, for each local cell present in the Node B, the Node B internal resource capability and consumption laws within the *Local Cell Information* IE. If the *UL Capacity Credit* IE is not present, then the internal resource capabilities of the local cell are modelled as shared resources between Uplink and Downlink. If the Local Cell utilises Node B internal resource capabilities that are pooled for several Local Cell(s), the *Local Cell Group ID* IE shall contain the identity of the used Local Cell Group.

The Node B shall include one *Cell Information* IE for each cell in the Node B and information about all common transport channels and all common physical channels for each cell. If a *Configuration Generation ID* IE for a cell can not be trusted, the Node B shall set this *Configuration Generation ID* IE = `"0"`.

The Node B shall also include one *Communication Control Port Information* IE for each eCommunication eControl pPort in the Node B.

8.2.7.3 Unsuccessful Operation

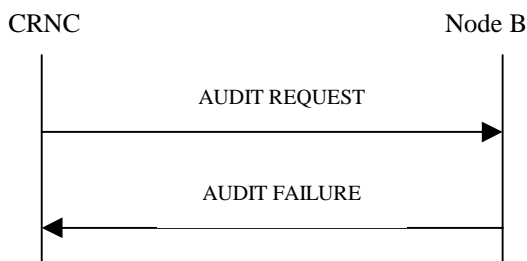


Figure 10A: Audit procedure, Unsuccessful Operation

If the Node B can-not perform an audit of the configuration and status of the logical resources, it shall send an **AUDIT FAILURE** message with the *Cause* IE set to an appropriate value.

8.2.7.4 Abnormal Conditions

If the Node B receives the **AUDIT REQUEST** message with the *Start of Audit Sequence* IE set to "not start of audit sequence" and there is no ongoing audit sequence, the Node B shall send the **AUDIT FAILURE** message with the appropriate cause value.

8.2.8 Common Measurement Initiation

8.2.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on common resources in a Node B.

8.2.8.2 Successful Operation

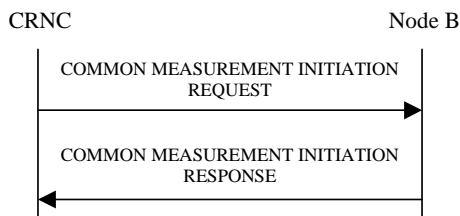


Figure 11: Common Measurement Initiation procedure, Successful Operation

The procedure is initiated with a **COMMON MEASUREMENT INITIATION REQUEST** message sent from the CRNC to the Node B using the Node B **eControl pPort**.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

[TDD - If the **Time Slot Information** [3.84Mcps TDD – *Time Slot IE*] [1.28Mcps TDD – *Time Slot LCR IE*] is provided present in the **COMMON MEASUREMENT INITIATION REQUEST message** *Common Measurement Object Type IE*, the measurement request shall apply to the requested time slot individually.]

[FDD - If the **Spreading Factor Information** *Spreading Factor IE* is provided present in the **COMMON MEASUREMENT INITIATION REQUEST message** *Common Measurement Object Type IE*, the measurement request shall apply to the PCPCHs whose minimum allowed spreading factor (Min UL Channelisation Code Length) is equal to the value of **the Spreading Factor IE** *Spreading Factor Information*.

If the *Common Measurement Type IE* is not set to "SFN-SFN Observed Time Difference" and the *SFN Reporting Indicator IE* is set to "FN Reporting Required", the *SFN IE* shall be included in the **COMMON MEASUREMENT**

REPORT message measurement report or in the **COMMON MEASUREMENT RESPONSE message measurement response**, the latter only in the case the *Report Characteristics* IE is set to **"On-Demand"**. The reported SFN shall be the SFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25]. If the *Common Measurement Type* IE is set to **"SFN-SFN Observed Time Difference"** and the *SFN Reporting Indicator* IE is ignored.

If the *SFN* IE is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

Common measurement type

If the *Common Measurement Type* IE is set to **"SFN-SFN Observed Time Difference"**, then the Node B shall initiate the SFN-SFN Observed Time Difference measurements between the reference cell identified by *C-ID* IE and the neighbouring cells identified by the *UTRAN Cell Identifier(UC-Id)* IE.

Report characteristics

The *Report Characteristics* IE indicates how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to **"On-Demand"**, the Node B shall **report-return** the result of the requested measurement immediately.

If the *Report Characteristics* IE is set to **"Periodic"**, the Node B shall periodically initiate a **Common** Measurement Reporting procedure for this measurement, with the requested report frequency. If the *Common Measurement Type* IE is set to **"SFN-SFN Observed Time Difference"**, all the available measurement results shall be reported in the *Successful Neighbouring eCell SFN-SFN Observed Time Difference Measurement Information* IE in the *SFN-SFN Measurement Value Information* IE and the Node B shall indicate in the *Unsuccessful Neighbouring eCell SFN-SFN Observed Time Difference Measurement Information* IE all the remaining neighbouring cells with no measurement result available in the Common Measurement Reporting procedure.

If the *Report Characteristics* IE is set to **"Event A"**, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If **the Measurement Hysteresis Time IE is not included no hysteresis time is given**, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to **"Event B"**, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If **the Measurement Hysteresis Time IE is not included no hysteresis time is given**, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to **"Event C"**, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising/falling time **specified by the Measurement Change Time IE** has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to **"Event D"**, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls **more by an amount greater** than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the rising/falling time **specified by the Measurement Change Time IE** has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to **"Event E"**, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If **the Measurement Threshold 2 IE Measurement Threshold 2** is not present, the Node B shall use **the value of the Measurement Threshold 1 IE Measurement Threshold 1** instead. If **the Measurement Hysteresis Time IE is not included no Measurement Hysteresis Time is provided**, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to **"Event F"**, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the

Node B shall also initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If ~~the Measurement Threshold 2 IE 'Measurement Threshold 2'~~ is not present, the Node B shall use ~~the value of the Measurement Threshold 1 IE 'Measurement Threshold 1'~~ instead. If ~~the Measurement Hysteresis Time IE is not included no 'Measurement Hysteresis Time' is provided~~, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to "On Modification", the Node B shall report the result of the requested measurement immediately. Then, the Node B shall initiate the Common Measurement Reporting procedure in accordance to the following conditions:

1. If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frame" for **LCSUE Positioning**:

- If the *T_{UTRAN-GPS} Change Limit* IE is included in the *T_{UTRAN-GPS} Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of T_{UTRAN-GPS} value (F_n). The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of -F_n rises above the threshold indicated by the *T_{UTRAN-GPS} Change Limit* IE. The change of T_{UTRAN-GPS} value (F_n) is calculated according to the following:

$$F_n = 0 \text{ for } n=0$$

$$F_n = (M_n - M_{n-1}) \bmod 37152912000000 - ((SFN_n - SFN_{n-1}) \bmod 4096) * 10 * 3.84 * 10^3 * 16 + F_{n-1}$$

$$\text{---} \text{ for } n > 0$$

F_n is the change of the T_{UTRAN-GPS} value expressed in unit [1/16 chip] when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M_{n-1} is the previous measurement result received after point C in the measurement model [25], measured at SFN_{n-1}.

M₁ is the first measurement result received after point C in the measurement model [25], after the first Common Measurement Reporting at initiation or after the last event was triggered.

M₀ is equal to the value reported in the first Common Measurement Reporting at initiation or in the Common Measurement Reporting when the event was triggered.

- If the *Predicted T_{UTRAN-GPS} Deviation Limit* IE is included in the *T_{UTRAN-GPS} Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the P_n and F_n. The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when -F_n rises above the threshold indicated by the *Predicted T_{UTRAN-GPS} Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$$P_n = b \text{ for } n=0$$

$$P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096) / 100 + ((SFN_n - SFN_{n-1}) \bmod 4096) * 10 * 3.84 * 10^3 * 16 + P_{n-1}) \bmod 37158912000000 \text{ for } n > 0$$

$$F_n = \min((M_n - P_n) \bmod 37158912000000, (P_n - M_n) \bmod 37158912000000) \text{ for } n > 0$$

P_n is the predicted T_{UTRAN-GPS} value when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported T_{UTRAN-GPS} Drift Rate value.

b is the last reported T_{UTRAN-GPS} value.

F_n is the deviation of the last measurement result from the predicted $T_{\text{UTRAN-GPS}}$ value (P_n) when n measurements have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n .

M_j is the first measurement result received after point C in the measurement model [25], after the first Common Measurement Reporting at initiation or after the last event was triggered.

The $T_{\text{UTRAN-GPS}}$ Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

2. If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference":

- If the *SFN-SFN Change Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of SFN-SFN value (F_n). The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when F_n rises above the threshold indicated by the *SFN-SFN Change Limit* IE. The change of the SFN-SFN value is calculated according to the following:

$$F_n = 0 \text{ for } n=0$$

$$[\text{FDD} - F_n = (M_n - a) \bmod 614400 \text{ for } n > 0]$$

$$[\text{TDD} - F_n = (M_n - a) \bmod 40960 \text{ for } n > 0]$$

F_n is the change of the SFN-SFN

value expressed in unit [1/16 chip] when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n .

M_j is the first measurement result received after point C in the measurement model [25] after the first Common Measurement Reporting at initiation or after the last event was triggered.

- If the *Predicted SFN-SFN Deviation Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the P_n and F_n . The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when the F_n rises above the threshold indicated by the *Predicted SFN-SFN Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$$P_n = b \text{ for } n=0$$

$$[\text{FDD} - P_n = ((a/16) * ((\text{SFN}_n - \text{SFN}_{n-1}) \bmod 4096) / 100 + P_{n-1}) \bmod 614400 \text{ for } n > 0]$$

$$[\text{FDD} - F_n = \min((M_n - P_n) \bmod 614400, (P_n - M_n) \bmod 614400) \text{ for } n > 0]$$

$$[\text{TDD} - P_n = ((a/16) * (15 * (\text{SFN}_n - \text{SFN}_{n-1}) \bmod 4096 + (TS_n - TS_{n-1})) / 1500 + P_{n-1}) \bmod 40960 \text{ for } n > 0]$$

$$[\text{TDD} - F_n = \min((M_n - P_n) \bmod 40960, (P_n - M_n) \bmod 40960) \text{ for } n > 0]$$

P_n is the predicted SFN-SFN value when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN Drift Rate value.

b is the last reported SFN-SFN value.

abs denotes the absolute value.

F_n is the deviation of the last measurement result from the predicted *SFN-SFN* value (P_n) when n measurements have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at the [TDD - the Time Slot TS_n of] of the Frame SFN_n .

M_1 is the first measurement result received after point C in the measurement model [25] after the first Common Measurement Reporting at initiation or after the last event was triggered.

The *-SFN-SFN Drift Rate* is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

If the *Report Characteristics* IE is not set to "On-Demand", the Node B is required to perform reporting for a common measurement object, in accordance with the conditions provided in the COMMON MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no common measurement object(s) for which a measurement is defined exists any-more, the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Common Measurement Reporting procedure immediately, and then continue with the measurements as specified in the COMMON MEASUREMENT INITIATION REQUEST message.

Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows:

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the COMMON MEASUREMENT INITIATION RESPONSE, COMMON MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n)

$a = 1/2^{(k/2)}$, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

Common measurement accuracy

If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frame" for "LCSUE Positioning", then the Node B shall use the *UTRAN GPS Timing Measurement Accuracy Class* IE included in the *Common Measurement Accuracy* IE according to the following:

- If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates "Class A", then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes A, B and C.
- If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates "Class B", then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes B and C.
- If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates "Class C", then the Node B shall perform the measurements with the accuracy according to class C.

Response message

If the Node B was able to initiate the measurement requested by the CRNC, it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message sent over the Node B eControl pPort. The message shall include the same Measurement ID that was used in the measurement request. Only in the case where the *Report*

Characteristics IE is set to "On-Demand"; or "On Modification", the COMMON MEASUREMENT INITIATION RESPONSE message shall contain the measurement result and also the *Common Measurement Achieved Accuracy* IE if the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frame" for "LCSUE Positioning".

If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference" and the *Report Characteristics* IE is set to "On Demand" or "On Modification", all the available measurement results shall be reported in the *Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information* IE in the *SFN-SFN Measurement Value Information* IE and the Node B shall indicate in the *Unsuccessful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information* IE all the remaining neighbouring cells with no measurement result available in the COMMON MEASUREMENT INITIATION RESPONSE message.

8.2.8.3 Unsuccessful Operation

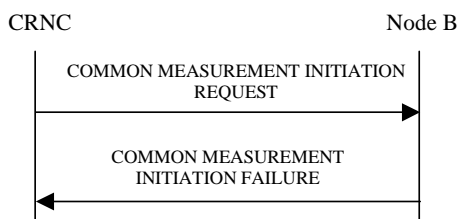


Figure 12: Common Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a COMMON MEASUREMENT INITIATION FAILURE message sent over the Node B eControl pPort. The message shall include the same Measurement ID that was used in the COMMON MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Measurement not supported for the object.
- Measurement Temporarily not Available

8.2.8.4 Abnormal Conditions

If the Common Measurement Type received in the *Common Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Common Measurement Object Type received in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

[TDD - If the eCommon mMeasurement tType requires the Time Slot Information but the [3.84Mcps TDD - Time Slot IE] [1.28Mcps TDD - Time Slot LCR IE] is not present provided in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.]

If the COMMON MEASUREMENT INITIATION REQUEST message contains the *SFN-SFN Measurement Threshold Information* IE (in the *Measurement Threshold* IE contained in the *Report Characteristics* IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the COMMON MEASUREMENT INITIATION REQUEST message contains the *T_{UTRAN-GPS} Measurement Threshold Information* IE (in the *Measurement Threshold* IE contained in the *Report Characteristics* IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", but the *Neighbouring Cell Measurement Information* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for LCSUE Positioning", but the *T_{UTRAN-GPS} Measurement Accuracy Class* IE in the *Common Measurement Accuracy* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

The allowed combinations of the Common *mMeasurement tType* and Report *eCharacteristics tType* are shown in the table below marked with "X". For not allowed combinations, the Node B shall regard the Common Measurement Initiation procedure as failed.

Table 4: Allowed Common *mMeasurement tType* and Report *eCharacteristics tType* combinations

Common <i>mMeasurement tType</i>	Report <i>eCharacteristics tType</i>								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
Received <i>tTotal wWide bBand pPower</i>	X	X	X	X	X	X	X	X	
Transmitted Carrier Power	X	X	X	X	X	X	X	X	
Acknowledged PRACH <i>pPreambles</i>	X	X	X	X	X	X	X	X	
UL Timeslot ISCP	X	X	X	X	X	X	X	X	
Acknowledged PCPCH Access Preambles	X	X	X	X	X	X	X	X	
Detected PCPCH Access Preambles	X	X	X	X	X	X	X	X	
UTRAN GPS Timing of Cell Frames for LCSUE Positioning	X	X							X
SFN-SFN Observed Time Difference	X	X							X

8.2.9 Common Measurement Reporting

8.2.9.1 General

This procedure is used by the *a*-Node B to report the result of measurements requested by the CRNC with the Common Measurement Initiation procedure.

8.2.9.2 Successful Operation

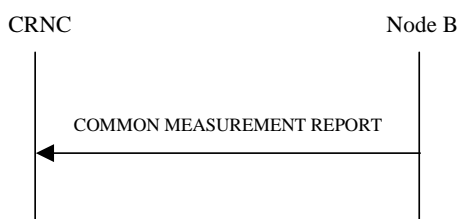


Figure 13: Common Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the Node B shall initiate the Common Measurement Reporting procedure. The COMMON MEASUREMENT REPORT message shall use the Node B eControl pPort.

The **Common Measurement ID** IE shall be set to the **Common Measurement ID** provided by the CRNC when initiating the measurement with the Common Measurement Initiation procedure.

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see ref.[22] and [23]), the Measurement not available shall be reported.

8.2.9.3 Abnormal Conditions

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8.2.10 Common Measurement Termination

8.2.10.1 General

This procedure is used by the CRNC to terminate a measurement previously requested by the Common Measurement Initiation procedure.

8.2.10.2 Successful Operation



Figure 14: Common Measurement Termination procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT TERMINATION REQUEST message, sent from the CRNC to the Node B using the Node B eControl pPort.

Upon reception, the Node B shall terminate reporting of **common** measurements corresponding to the **received Measurement ID IE**~~Common Measurement ID~~.

8.2.10.3 Abnormal Conditions

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8.2.11 Common Measurement Failure

8.2.11.1 General

This procedure is used by the Node B to notify the CRNC that a measurement previously requested by the Common Measurement Initiation procedure can no longer be reported.

8.2.11.2 Successful Operation



Figure 15: Common Measurement Failure procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT FAILURE INDICATION message, sent from the Node B to the CRNC using the Node B *e*Control *p*Port, to inform the CRNC that a previously requested measurement can no longer be reported. The Node B has locally terminated the indicated measurement.

8.2.11.3 Abnormal Conditions

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8.2.12 Cell Setup

8.2.12.1 General

This procedure is used to set up a cell in *the* Node B. The CRNC takes the cell, identified via the *C-ID* IE, into service and uses the resources in *the* Node B identified via the *Local Cell ID* IE.

8.2.12.2 Successful Operation

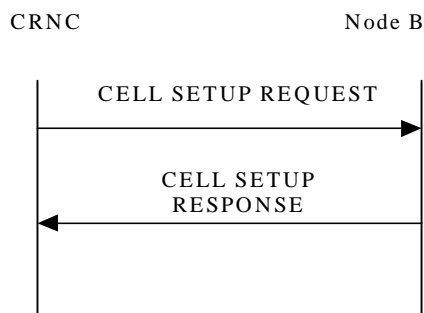


Figure 16: Cell Setup procedure, Successful Operation

The procedure is initiated with a CELL SETUP REQUEST message sent from *the* CRNC to *the* Node B *using the Node B Control Port*. Upon Reception, the Node B shall reserve the necessary resources and configure the new cell according to the parameters given in the message.

[FDD - If the CELL SETUP REQUEST message includes one or more *Secondary CPICH Information IE*, the Node B shall configure and activate the Secondary CPICH(s) in the cell according to received configuration data.]

The *Maximum Transmission Power IE* value shall be stored in the Node B and, at any instance of time, the total maximum output power in the cell shall not be above this value.

[FDD - If the *Closed Loop Timing Adjustment Mode IE* is included in the CELL SETUP REQUEST message, the value shall be stored in the Node B and applied when closed loop Feed-Back mode diversity is used on DPCH.]

[TDD - If the *Reference SFN eOffset IE* is included in the CELL SETUP REQUEST message, *the* Node B where a reference clock is connected shall consider the SFN derived from the synchronisation port and the reference offset for reference time setting. All other Node Bs shall ignore the *Reference SFN eOffset IE* if included.]

If the *IPDL Parameter Information IE* is included in the CELL SETUP REQUEST message, the parameters defining IPDL shall be stored in the Node B and applied according to the *IPDL Indicator IE* value.

When the cell is successfully configured, the Node B shall store the *Configuration Generation ID IE* value and send a CELL SETUP RESPONSE message as a response.

[FDD - When the cell is successfully configured, *the* CPICH(s), Primary SCH, Secondary SCH, Primary CCPCH and BCH exist.][3.84Mcps TDD - When the cell is successfully configured, *the* SCH, Primary CCPCH and BCH exist and the switching-points for the 3.84Mcps TDD frame structure are defined.] [1.28Mcps TDD - When the cell is successfully configured, *the* DwPCH, Primary CCPCH and BCH exist and the switching-points for the 1.28Mcps TDD frame structure are defined.] The cell and the channels shall be set to *the* state Enabled [6].

8.2.12.3 Unsuccessful Operation

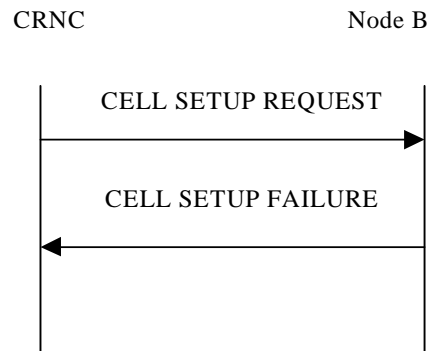


Figure 17: Cell Setup procedure: Unsuccessful Operation

If the Node B cannot set up the cell according to the information given in CELL SETUP REQUEST message, the CELL SETUP FAILURE message shall be sent to the CRNC.

In this case, the cell is Not Existing in the Node B. The Configuration Generation ID shall not be changed in the Node B.

The *Cause* IE shall be set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- S-CPICH not supported
- Requested Tx Diversity Mode not supported
- Power level not supported
- Node B Resources unavailable
- IPDL not supported

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.12.4 Abnormal Conditions

If the state of the cell already is Enabled or Disabled [6] when the CELL SETUP REQUEST message is received in the Node B, it shall reject the configuration of the cell and all channels in the CELL SETUP REQUEST message by sending a CELL SETUP FAILURE message with the *Cause* IE set to "Message not compatible with receiver state".

8.2.13 Cell Reconfiguration

8.2.13.1 General

This procedure is used to reconfigure a cell in the Node B.

8.2.13.2 Successful Operation

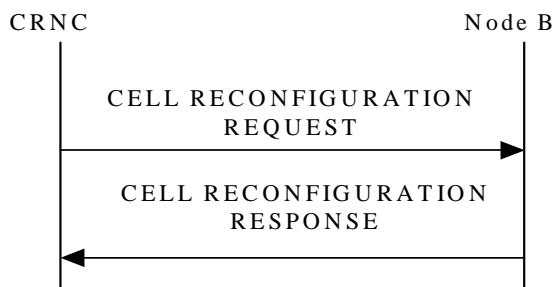


Figure 18: Cell Reconfiguration procedure, Successful Operation

The procedure is initiated with a CELL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon Reception, the Node B shall reconfigure the cell according to the parameters given in the message.

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary SCH Information IE*, the Node B shall reconfigure the Primary SCH power in the cell according to *Primary SCH Power IE* value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Secondary SCH Information IE*, the Node B shall reconfigure the Secondary SCH power in the cell according to the *Secondary SCH Power IE* value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CPICH Information IE*, the Node B shall reconfigure the Primary CPICH power in the cell according to the *Primary CPICH Power IE* value. The Node B shall adjust all the transmitted power levels relative to the Primary CPICH power according to the new value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes one or more *Secondary CPICH Information IE*, the Node B shall reconfigure the power for each Secondary CPICH in the cell according to their *Secondary CPICH Power IE* value.]

[3.84Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *SCH Information IE*, the Node B shall reconfigure the SCH power in the cell according to the *SCH Power IE* value.]

[3.84Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *Timing Advance Applied IE*, the Node B shall apply the necessary functions for Timing Advance in that cell including reporting of the Rx Timing Deviation measurement, according to the *Timing Advance Applied IE* value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CCPCH Information IE*, the Node B shall reconfigure the BCH power in the cell according to the *BCH Power IE* value.]

[TDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CCPCH Information IE*, the Node B shall reconfigure the P-CCPCH power in the cell according to the *P-CCPCH Power IE* value. The Node B shall adjust all the transmitted power levels relative to the Primary CPPCH power according to the new value.]

If the CELL RECONFIGURATION REQUEST message includes the *Maximum Transmission Power IE*, the value shall be stored in the Node B and at any instance of time the total maximum output power in the cell shall not be above this value.

[TDD - If the CELL RECONFIGURATION REQUEST message includes the *Timeslot Information IE*, the Node B shall reconfigure switching-point structure in the cell according to the *Timeslot IE* value.]

[TDD - If the CELL RECONFIGURATION REQUEST message includes any of the *Constant Value IEs*, the Node B shall use these values when generating the appropriate SIB.]

If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information* IE with the *IPDL Indicator* IE having set to the value "aActive", the Node B shall apply the IPDL in that cell according to the latest downloaded parameters defined by the *IPDL FDD Parameters* IE / *IPDL TDD Parameters* IE.

If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information* IE with the *IPDL Indicator* IE having set to the value "iInactive", the Node B shall deactivate the ongoing IPDL.

When the cell is successfully reconfigured, the Node B shall store the new *Configuration Generation ID* IE value and send a CELL RECONFIGURATION RESPONSE message as a response.

If the CELL RECONFIGURATION REQUEST message includes the *Synchronisation Configuration* IE, the Node B shall reconfigure the indicated parameters in the cell according to the value of the *N_INSYNC_IND*, *N_OUTSYNC_IND* and *T_RLFAILURE* IEs value. When the parameters in the *Synchronisation Configuration* IE affect the thresholds applied to a RL set, the Node B shall immediately apply the new thresholds. When applying the new thresholds, the Node B shall not change the state or value of any of the timers and counters for which the new thresholds apply.

8.2.13.3 Unsuccessful Operation

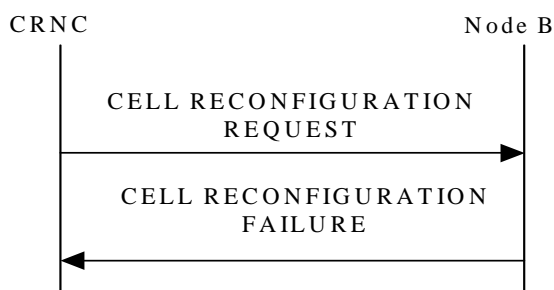


Figure 19: Cell Reconfiguration procedure: Unsuccessful Operation

If the Node B cannot reconfigure the cell according to the information given in CELL RECONFIGURATION REQUEST message, the CELL RECONFIGURATION FAILURE message shall be sent to the CRNC.

In this case, the Node B shall keep the old configuration of the cell and the Configuration Generation ID shall not be changed in the Node B.

The *Cause-Cause* IE shall be set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Power level not supported
- Node B Resources unavailable
- IPDL not supported

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.13.4 Abnormal Conditions

If the *IPDL Indicator* IE *having-set-to* the value "*aActive*" is included in the CELL RECONFIGURATION REQUEST message and there is active IPDL ongoing in the Node B, the Node B shall respond with the CELL RECONFIGURATION FAILURE- message with the cause value "*IPDL already activated*."

If the *IPDL Indicator* IE *having-set-to* the value "*aActive*" is included in the CELL RECONFIGURATION REQUEST message and there is no IPDL stored in the Node B defining the IPDL, the Node B shall respond with the CELL RECONFIGURATION FAILURE- message with the cause value "*IPDL parameters not available*."

8.2.14 Cell Deletion

8.2.14.1 General

This procedure is used to delete a cell in the Node B.

8.2.14.2 Successful Operation

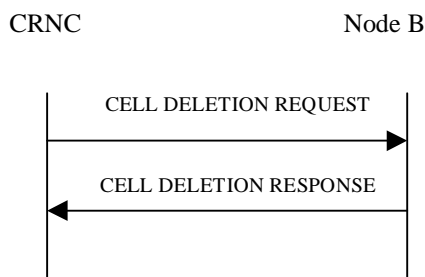


Figure 10: Cell Deletion procedure, Successful Operation

The procedure is initiated with a CELL DELETION REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon reception, the Node B shall remove the cell and any remaining common and dedicated channels within the cell. The states for the cell and the deleted common channels shall be set to Not Existing [6]. The Node B shall remove all Radio Links from the Cell and all Node B Communication Contexts that as a result do not have a Radio Link. The Node B shall also initiate release of the user plane transport bearers for the removed common and dedicated channels.

When the cell is deleted, the Node B shall send a CELL DELETION RESPONSE message as a response.

8.2.14.3 Unsuccessful Operation

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8.2.14.4 Abnormal Conditions

If the CELL DELETION REQUEST message includes a *C-ID* IE value that is not existing in the Node B, the Node B shall respond with the CELL DELETION RESPONSE message.

8.2.15 Resource Status Indication

8.2.15.1 General

This procedure is used in the following cases:

1. When a Local Cell becomes Existing at the Node B.
2. When a Local Cell is to be deleted in Node B, i.e. becomes Not Existing.
3. When the capabilities of the Local Cell change at the Node B.

4. When a cell has changed its capability and/or its resource operational state at the Node B.
5. When common physical channels and/or common transport channels have changed their capabilities at a-the Node B.
6. When a eCommunication eControl pPort has changed its resource operational state at the Node B.
7. When a Local Cell Group has changed its resource capability at the Node B.

Each of the above cases shall trigger a Resource Status Indication procedure and the RESOURCE STATUS INDICATION message shall contain the logical resources affected for that case and the cause value when applicable.

8.2.15.2 Successful Operation



Figure 21: Resource Status Indication procedure, Successful Operation

The procedure is initiated with a RESOURCE STATUS INDICATION message sent from the Node B to the CRNC using the Node B Control Port.

Local Cell Becomes Existing:

When a Local Cell becomes Existing at the Node B, the Node B shall make it available to the CRNC by sending a RESOURCE STATUS INDICATION message containing with the Indication Type IE set equal to a "No Failure" Indication, the Local Cell ID IE and the Add/Delete Indicator IE set equal to "Add".

When the capacity credits and consumption laws are shared between several Local Cells, the Node B includes the *Local Cell Group ID IE* for the Local Cell. If the *Local Cell Group Information IE* has not already been reported in a previous RESOURCE STATUS INDICATION message, the Node B shall include the capacity credits and the consumption laws in the *Local Cell Group Information IE*.

If the *Local Cell IE* contains both the *DL or Global Capacity Credit IE* and the *UL Capacity Credit IE*, then the internal resource capabilities of the Local Cell are modelled independently in the Uplink and Downlink direction. If the *UL Capacity Credit IE* is not present, then the internal resource capabilities of the Local Cell are modelled as shared resources between Uplink and Downlink. If the *Local Cell Group Information IE* contains both the *DL or Global Capacity Credit IE* and the *UL Capacity Credit IE*, then the internal resource capabilities of the Local Cell Group are modelled independently in the Uplink and Downlink direction. If the *UL Capacity Credit IE* is not present, then the internal resource capabilities of the Local Cell Group are modelled as shared resources between Uplink and Downlink.

[TDD - The Node B shall include the *Reference Clock Availability IE* within the *Local Cell IE* to indicate the availability of a Reference clock connected to the Local Cell, when a Local Cell is made available to the CRNC.]

Local Cell Deletion:

When a Local Cell is to be deleted in the Node B, i.e. becomes Not Existing, the Node B shall withdraw the Local Cell from the CRNC by sending a RESOURCE STATUS INDICATION message containing with the Indication Type IE set equal to a "No Failure" Indication, the *Local Cell ID IE* and the *Add/Delete Indicator IE* set equal to "Delete". The Node B shall not withdraw a previously configured cell at the Node B that the CRNC had configured using the Cell Setup procedure, until the CRNC has deleted that cell at the Node B using the Cell Delete procedure.

Capability Change of a Local Cell:

When the capabilities of a Local Cell change at the Node B, the Node B shall report the new capability by sending a RESOURCE STATUS INDICATION message containing with the Indication Type IE set equal to a "Service Impacting" Indication and the Local Cell ID IE.

The Node B shall include the *Minimum DL Power Capability IE* when it is known by the Node B.

If the **maximum** DL power capability **of the Local Cell** has changed, the new capability shall be indicated in the **Maximum DL Power Capability** IE.

If the DL capability for supporting the minimum spreading factor has changed, the new capability shall be indicated in the *Minimum Spreading Factor* IE.

[TDD - If the availability of the Reference clock connected to a Local Cell has changed, the new availability condition shall be indicated in the *Reference Clock Availability* IE.]

The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value. If the internal resource capabilities of the Local Cell are affected, it shall be reported in the following way:

- If the internal resource capabilities of the Local Cell are modelled as shared resources between Uplink and Downlink, the new capacity shall be reported in the *DL or Global Capacity Credit* IE.
- If the internal resource capabilities of the Local Cell are modelled independently in the Uplink and Downlink direction, then the *DL or Global Capacity Credit* IE and the *UL Capacity Credit* IE shall be present in the RESOURCE STATUS INDICATION. **If the maximum DL power capability of the Local Cell is affected, this shall be reported using the Maximum DL Power Capability IE.**

Capability Change of a Cell:

When the capabilities and/or resource operational state of a cell changes at the Node B, the Node B shall report the new capability and/or resource operational state by sending a RESOURCE STATUS INDICATION message **containing with the Indication Type IE set equal to a** "Service Impacting" **Indication**, the *C-ID* IE, the *Resource Operational State* IE and the *Availability Status* IE. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

Capability Change of a Common Physical Channel and/or Common Transport Channel:

The Node B shall not delete any common or dedicated channels, due to the cell being "Disabled". For all affected common and dedicated channels, the Node B shall report the impact to the CRNC with the relevant procedures.

When the capabilities and/or resource operational state of common physical channels and/or common transport channels have changed, the Node B shall report the new capability and/or resource operational state by sending a RESOURCE STATUS INDICATION message **containing with the Indication Type IE set equal to a** "Service Impacting" **Indication**, the *Resource Operational State* IE and the *Availability Status* IE set to appropriate values for the affected channel(s). The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

When a power value for a common physical channel and/or a common transport channel becomes beyond the supported power value range due to a change in capability in **the Node Bs**, it shall be reported to the CRNC in the RESOURCE STATUS INDICATION message, with the *Resource Operational State* IE set to "Enabled", the *Availability Status* IE set to "Degraded" and the *Cause* IE set to "Power level not supported". Affected channels shall use the nearest power value that is supported.

Capability Change of a Communication Control Port:

When the resource operational state of a **eCommunication eControl pPort** has changed, the Node B shall report the new resource operational state by sending a RESOURCE STATUS INDICATION message **containing with the Indication Type IE set equal to a** "Service Impacting" **Indication** and the *Communication Control Port ID* IE. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

Capability Change of a Local Cell Group:

When the resource capabilities of a Local Cell Group change at the Node B, the Node B shall report the new capability by sending a RESOURCE STATUS INDICATION message **containing with the Indication Type IE set equal to a** "Service Impacting" **Indication** and the *Local Cell Group Information* IE reporting the change. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to an appropriate value. If the RESOURCE STATUS INDICATION message contains both the *DL or Global Capacity Credit* IE and the *UL Capacity Credit* IE, then the internal resource capabilities of the Node B are modelled independently in the Uplink and Downlink direction. If the *UL Capacity Credit* IE is not present, then the internal resource capabilities of the Node B are modelled as shared resources between Uplink and Downlink.

General:

When the RESOURCE STATUS INDICATION [message](#) is used to report an error, only one cause value for all reported objects can be sent in one message. When the RESOURCE STATUS INDICATION [message](#) is used to clear errors, only all errors for one object can be cleared per message. It is not possible to clear one out of several errors for one object.

8.2.15.3 Abnormal Conditions

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8.2.16 System Information Update

8.2.16.1 General

The System Information Update procedure performs the necessary operations in order for the Node B to apply the correct scheduling of and/or to include the appropriate contents to the system information segments broadcast on the BCCH.

8.2.16.2 Successful Operation

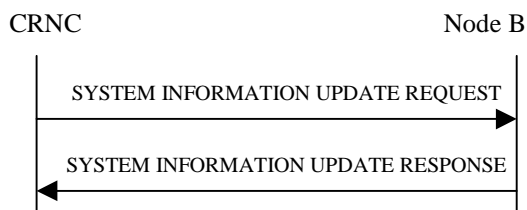


Figure 22: System Information Update procedure, Successful Operation

The procedure is initiated with a SYSTEM INFORMATION UPDATE REQUEST message sent from the CRNC to the Node B [using the Node B Control Port](#).

The Node B shall consider the requested updates to the BCCH schedule in the same order as the MIB/SB/SIB information is included in the SYSTEM INFORMATION UPDATE REQUEST message.

If the SYSTEM INFORMATION UPDATE REQUEST message includes the *BCCH Modification Time* IE, the updates to the BCCH schedule (possibly consisting of IB occurrence additions, IB occurrence deletions and IB occurrence contents updates) indicated in the SYSTEM INFORMATION UPDATE REQUEST message shall be applied by [the](#) Node B at the first time instance starting from the SFN value set by the *BCCH Modification Time* IE. If no *BCCH Modification Time* IE is included, the updates to the BCCH schedule shall be applied as soon as possible.

Information Block addition

If the SYSTEM INFORMATION UPDATE REQUEST message includes segments of a certain MIB/SB/SIB, the Node B shall assume that all segments for that Information Block are included in the message and ordered with increasing Segment Index (starting from 0). For each included segment, segment type information and *IB SG POS* IE are also given in the SYSTEM INFORMATION UPDATE REQUEST message.

The Node B shall determine the correct cell system frame number(s) (SFN) for transmission of the segments of system information, from the scheduling parameters provided in the SYSTEM INFORMATION UPDATE REQUEST message. The SFN for transmitting the segments shall be determined by the *IB SG REP* IE and *IB SG POS* IE such that:

$$- \text{SFN mod IB_SG_REP} = \text{IB_SG_POS}$$

If the SYSTEM INFORMATION UPDATE REQUEST message contains Master Information Block (MIB) segments in addition to SIB or SB segments, the MIB segments shall first be sent in the physical channel by the Node B. Once these MIB segments have been sent in the physical channel, the updated SB/SIB segments shall then be sent in the physical channel.

Only if the inclusion of each new IB segment in the BCCH schedule leads to a valid segment combination according to [18], the Node B shall accept the system information update.

If the *SIB Originator* IE value is set to "Node B", the Node B shall create the SIB segment of the SIB type given by the *IB Type* IE and autonomously update the SIB segment and apply the scheduling and repetition as given by the *IB SG REP* IE and *IB SG POS* IE.

SIBs originating from the Node B can only be SIBs containing information that the Node B can obtain on its own.

Information Block deletion

If an IB Deletion is indicated in an instance of *MIB/SB/SIB information* IE in the SYSTEM INFORMATION UPDATE REQUEST message, the Node B shall delete the IB indicated by the *IB Type* IE and *IB OC ID* IE from the transmission schedule on BCCH.

Information Block update

If the SYSTEM INFORMATION UPDATE REQUEST message contains segments for an IB without *IB SG REP* IE and *IB SG POS* IE and there is already an IB in the BCCH schedule with the same IB Type and IB OC ID which is not requested to be deleted from the BCCH schedule by an IB deletion indicated in a *MIB/SB/SIB information* IE repetition present in the SYSTEM INFORMATION UPDATE REQUEST message before the IB segments are included, then the Node B shall only update the contents of the IB segments without any modification in segment scheduling.

If the Node B successfully completes the updating of the physical channel scheduling cycle according to the parameters given in the SYSTEM INFORMATION UPDATE REQUEST message, it shall respond to the CRNC with a SYSTEM INFORMATION UPDATE RESPONSE message.

8.2.16.3 Unsuccessful Operation

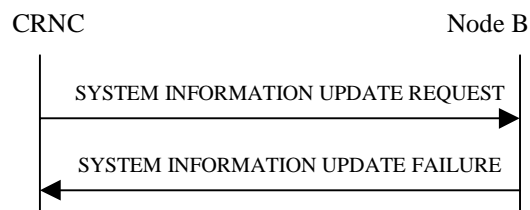


Figure 23: System Information Update procedure: Unsuccessful Operation

If the Node B is unable to update the physical channel scheduling cycle according to all the parameters given in the SYSTEM INFORMATION UPDATE REQUEST message, it shall respond with a SYSTEM INFORMATION UPDATE FAILURE message with an appropriate cause value. **No changes to the BCCH schedule are made in this case.**

The Node B shall not incorporate any of the requested changes into the physical channel scheduling cycle, and the previous system information configuration shall remain intact.

Typical cause values are:

Radio Network Layer Cause

- SIB Origination in Node B not Supported

Miscellaneous Cause

- Hardware failure
- Control Processing overload
- O&M Intervention

In the case of failure, the Node B shall not incorporate any of the requested changes into the physical channel scheduling cycle, and the previous system information configuration shall remain intact.

8.2.16.4 Abnormal Conditions

The Node B shall reject, with the cause value "SIB origination in Node B not supported", requests for Node B originated system information blocks that make use of a value tag.

The Node B shall reject the requested update with cause value "BCCH scheduling error" if:

- After having handled a certain *MIB/SB/SIB information* IE repetition, an illegal BCCH schedule results;
- If a ~~*MIB/SB/SIB Information MIB/SB/SIB information*~~ IE repetition includes an *IB SG REP* IE or an *IB SG POS* IE and there is already an IB in the BCCH schedule with the same IB Type and IB OC ID which is not requested to be deleted from the BCCH schedule by an IB deletion indicated in a *MIB/SB/SIB information* IE repetition present in the SYSTEM INFORMATION UPDATE REQUEST message before the IB addition is indicated. This rule shall apply even if the scheduling instructions in *IB SG REP* IE and *IB SG POS* IE were the same as the current scheduling instructions for the concerned IB;
- If a ~~*MIB/SB/SIB Information MIB/SB/SIB information*~~ IE repetition includes no *IB SG REP* IE and *IB SG POS* IE and there is no IB in the BCCH schedule with the same IB Type and IB OC ID;
- If a ~~*MIB/SB/SIB Information MIB/SB/SIB information*~~ IE repetition includes no *IB SG REP* IE and *IB SG POS* IE and there is already an IB in the BCCH schedule with the same IB Type and IB OC ID but it is requested to be deleted from the BCCH schedule by an IB deletion indicated in a *MIB/SB/SIB information* IE repetition present in the SYSTEM INFORMATION UPDATE REQUEST message before the IB addition is indicated.

8.2.17 Radio Link Setup

8.2.17.1 General

This procedure is used for establishing the necessary resources for a new Node B Communication Context in the Node B.

[FDD – The [Radio Link](#) Setup procedure is used to establish one or more radio links. The procedure establishes one or more DCHs on all radio links, and in addition, it can include the establishment of one or more DSCHs on one radio link.]

[TDD – The [Radio Link](#) Setup procedure is used ~~to~~ establish one radio link including one or more transport channels. The transport channels can be a mixture of DCHs, DSCHs, and USCHs, including also combinations where one or more transport channel types are not present.]

8.2.17.2 Successful Operation

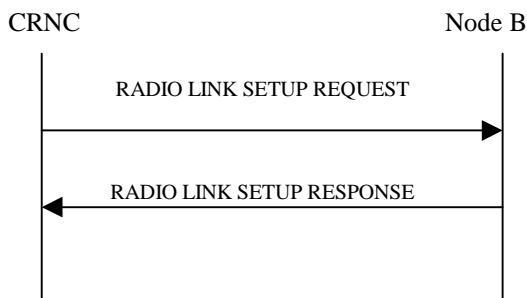


Figure 24: Radio Link Setup procedure, Successful Operation

The procedure is initiated with a RADIO LINK SETUP REQUEST message sent from the CRNC to [the Node B using the Node B Control Port](#).

Upon reception of [the RADIO LINK SETUP REQUEST](#) message, the Node B shall reserve necessary resources and configure the new Radio Link(s) according to the parameters given in the message.

The Node B shall prioritise resource allocation for the RL(s) to be established according to Annex A.

Transport Channels Handling:

DCH(s):

[TDD – If the *DCH Information* IE is present, the Node B shall configure the new DCH(s) according to the parameters given in the message.]

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs, then, the Node B shall treat the DCHs in the *DCH Information* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.

[FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If the ~~*QE-Selector*~~ *QE-Selector IE* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]

For a set of co-ordinated DCHs, the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD - If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE, ref. [16].]

The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs **to be added** as the FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs **to be added** as the Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs **to be added** as the Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The received *Frame Handling Priority* IE specified for each Transport Channel should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new RL(s) has been activated.

[FDD – The *Diversity Control Field* IE indicates for each RL (except the first RL in the message) whether the Node B shall combine the concerned RL or not.

- If the *Diversity Control Field* IE is set to "May", then Node B shall decide for either of the alternatives.

- If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL.

- If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.

Diversity combining is applied to Dedicated Transport Channels (DCH), i.e. it is not applied to the DSCHs. When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with. ~~If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.~~

[FDD – In the RADIO LINK SETUP RESPONSE message, the Node B shall indicate **for each RL** with the ~~*Diversity Indication IE*~~ ***Diversity Indication in the RL Information Response IE*** whether the RL is combined or not.

- In case of combining, **only** the *Reference RL ID* IE **shall be included to** indicate **s** one of the existing RLs that the concerned RL is combined with.

- In case of not combining, the Node B shall include **in the *DCH Information Response IE*** in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]

[TDD – The Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]

In the case of **a set of** co-ordinated DCHs, the *Binding ID* IE and the *Transport Layer Address* IE shall be specified for only one of the **DCHs in the set of** co-ordinated DCHs.

DSCH(s):

If the *DSCH Information* IE is present, the Node B shall configure the new DSCH(s) according to the parameters given in the message.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *TFCI2 Bearer Information* IE then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received. – The Node B shall manage the time of arrival of these frames according to the values of ToAWS and ToAWE specified in the IE²s. – The *Binding ID* IE and *the Transport Layer Address* IE for the new bearer to be set up for this purpose shall be returned in the RADIO LINK SETUP RESPONSE message.]

The Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and *the Transport Layer Address* IE for the transport bearer to be established for each DSCH of this RL.

[TDD – USCH(s)]:

[TDD – If the *USCH Information* IE is present, the Node B shall configure the new USCH(s) according to the parameters given in the message.]

[TDD – ~~In case~~ If the *USCH Information* IE is present, the Node B shall include in the RADIO LINK SETUP RESPONSE ~~message~~ the *Binding ID* IE and *the Transport Layer Address* IE for the transport bearer to be established for each USCH of this RL.]

Physical Channels Handling:

[FDD – Compressed Mode]:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the information about the Transmission Gap Pattern Sequences to be used in the Compressed Mode Configuration. This Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or *the* Node B Communication Context is deleted.]

[FDD – If the *Downlink compressed mode method* IE in one or more Transmission Gap Pattern Sequence is set to *"SF/2"* in the RADIO LINK SETUP REQUEST message, the Node B shall use or not the alternate scrambling code as indicated for each DL Channelisation Code in the *Transmission Gap Pattern Sequence Code Information* IE.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE and the *Active Pattern Sequence Information* IE, the Node B shall use the information to activate the indicated Transmission Gap Pattern Sequence(s) in the new RL. The received *CM Configuration Change CFN* refers to the latest passed CFN with that value The Node B shall treat the received *TGCFN* IEs as follows:]

- [FDD - If any received *TGCFN* IE has the same value as the received *CM Configuration Change CFN* IE, the Node B shall consider the concerned *edng* Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD - If any received *TGCFN* IE does not have the same value as the received *CM Configuration Change CFN* IE but the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN* IE has already passed, the Node B shall consider the concerned *edng* Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD - For all other Transmission Gap Pattern Sequences included in the *Active Pattern Sequence Information* IE, the Node B shall activate each Transmission Gap Pattern Sequence at the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN* IE for the Transmission Gap Pattern Sequence.]

[FDD – DL Code Information]:

[FDD – When more than one DL DPDCH ~~are~~ assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the *p*th to "*PhCH number p*".]

General:

[FDD – If the *Propagation Delay* IE is included, the Node B may use this information to speed up the detection of L1 synchronisation.]

[FDD – The *UL SIR Target* IE included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control.]

[1.28Mcps TDD – The *UL SIR Target* IE included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control according [19] and [21].]

[FDD – If the received *Limited Power Increase* IE is set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control.]

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP REQUEST message indicates that there shall be a hard split on the TFCI field but the *TFCI2 Bearer Information* IE is not included in the message, then the Node B shall transmit the TFCI2 field with zero power.]

[FDD - If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP REQUEST message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information* IE is included in the message, then the Node B shall transmit the TFCI2 field with zero power until Synchronization is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer (see ref. [24]).]

Radio Link Handling:

[FDD – Transmit Diversity]:

[FDD – When the *Diversity Mode* IE is set to "*STTD*", "*Closedloop mode1*", or "*Closedloop mode2*", the Node B shall activate/deactivate the Transmit Diversity ~~to~~for each Radio Link in accordance with the *Transmit Diversity Indication* IE]

DL Power Control:

[FDD – The Node B shall start the DL transmission using the initial DL power specified in the message on each DL DPCH of the RL until either UL synchronisation on the Uu interface is achieved for the RLS or Power Balancing is activated. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) and the power control procedure (see subclause 8.3.7), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message. During compressed mode, the $P_{SIR(k)}$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]

[FDD - If the *DPC Mode* IE is ~~is~~ present in the RADIO LINK SETUP REQUEST message, the Node B shall apply the DPC mode indicated in the message, and be prepared that the DPC mode may be changed during the life time of the RL. If the *DPC Mode* IE is not present in the RADIO LINK SETUP REQUEST message, DPC mode 0 shall be applied (see ref. [10]).]

[TDD – The Node B shall start the DL transmission using the initial DL power specified in the message on each DL DPCH and on each Time Slot of the RL until the UL synchronisation on the Uu interface is achieved for the RL. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message.]

[TDD – If the [3.84Mcps TDD - *DL Time Slot ISCP Info* IE] or [1.28Mcps TDD - *DL Timeslot ISCP LCR* IE] is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged].

[FDD – If the received *Inner Loop DL PC Status* IE is set to "Active", the Node B shall activate the inner loop DL power control for all RLs. If *Inner Loop DL PC Status* IE is set to "Inactive", the Node B shall deactivate the inner loop DL power control for all RLs according to ref. [10].]

General:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE and the *S-Field Length* IE, the Node B shall activate SSDT, if supported, using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

[FDD – Irrespective of SSDT activation, the Node B shall include in the RADIO LINK SETUP RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK SETUP REQUEST message requested SSDT activation and the RADIO LINK SETUP RESPONSE message indicates that the SSDT capability is supported for this RL, SSDT is activated in the Node B.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity for EDSCHPC* IE, the Node B shall activate enhanced DSCH power control, if supported, using the *SSDT Cell Identity fFor EDSCHPC* IE and *SSDT Cell Identity Length* IE as well as *Enhanced DSCH PC* IE in accordance with ref. [10] subclause 5.2.2. If the RADIO LINK SETUP REQUEST message includes both *SSDT Cell Identity* IE and *SSDT Cell Identity fFor EDSCHPC* IE, then the Node B shall ignore the value in *SSDT Cell Identity fFor EDSCHPC* IE]

The Node B shall start reception on the new RL(s) after the RLs are successfully established.

[FDD – Radio Link Set Handling]:

[FDD – The *First RLS Indicator* IE indicates if the concerned RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the Node B together with the value of the *DL TPC pPattern 01 eCount* IE which the Node B has received in the Cell Setup procedure, to determine the initial TPC pattern in the DL of the concerned RL and all RLs which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication eContext.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication eContext.]

[FDD – The UL out-of-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the maximum value of the parameters *N_OUTSYNC_IND* and *T_RLFAILURE*, and the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells supporting the radio links of the RL Set.]

Response Message:

If the RLs are successfully established, the Node B shall **start reception on the new RL(s) and** respond with a RADIO LINK SETUP RESPONSE message.

After sending of the RADIO LINK SETUP RESPONSE message, the Node B shall continuously attempt to obtain UL synchronisation on the Uu **interface and start reception on the new RL**. [FDD – The Node B shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16].] [TDD – The Node B shall start transmission on the new RL immediately as specified in [16].]

8.2.17.3 Unsuccessful Operation

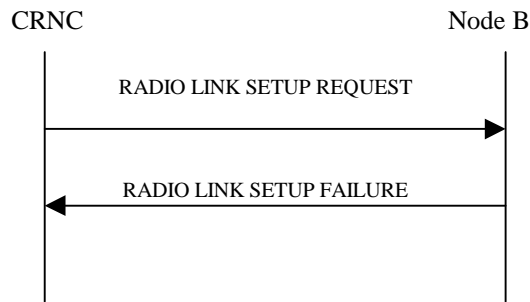


Figure 25: Radio Link Setup procedure: Unsuccessful Operation

If the establishment of at least one radio link is unsuccessful, the Node B shall respond with a RADIO LINK SETUP FAILURE message. The message contains the failure cause in the *Cause* IE.

[FDD – If some radio links were established successfully, the Node B shall indicate this in the RADIO LINK SETUP FAILURE message in the same way as in the RADIO LINK SETUP RESPONSE message. In this case, the Node B shall include the *Communication Control Port Id* IE in the RADIO LINK SETUP FAILURE message.]

Typical cause values are as follows:

Radio Network Layer Cause

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- Number of DL codes not supported
- Number of UL codes not supported
- UL SF not supported
- DL SF not supported
- Dedicated Transport Channel Type not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- DPC mode change not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.17.4 Abnormal Conditions

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Active Pattern Sequence Information* IE, but the *Transmission Gap Pattern Sequence Information* IE is not present, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Radio Link Setup procedure as failed and shall respond with a RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCH Information* IE do not have the same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

8.2.18 Physical Shared Channel Reconfiguration [TDD]

8.2.18.1 General

This procedure is used for handling PDSCH Sets and PUSCH Sets in the Node B, i.e.

- Adding new PDSCH Sets and/or PUSCH Sets,
- Modifying these, and
- Deleting them.

8.2.18.2 Successful Operation

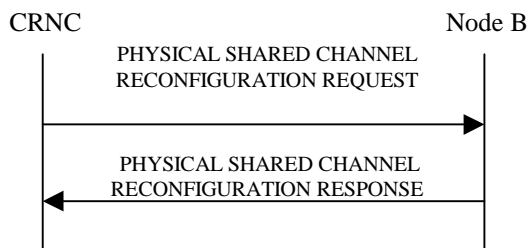


Figure 26: Physical Shared Channel Reconfiguration: Successful Operation

The procedure is initiated with a PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes an *SFN* IE, the Node B will shall activate the new configuration on that specified SFN.

PDSCH/PUSCH Addition

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be added, the Node B shall add these new sets to its PDSCH/PUSCH configuration.

PDSCH/PUSCH Modification

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be modified, and includes any of [3.84Mcps TDD - *TDD Channelisation Code* IE, *Midamble sShift* ~~a~~*And bBurst tType* IE, *Time Slot* IE], [1.28Mcps TDD - *TDD Channelisation Code LCR* IE, *Midamble sShift LCR* IE, *Time Slot LCR* IE], *TDD Physical Channel Offset* IE, *Repetition Period* IE, *Repetition Length* IE, or *TFCI pPresence* IE, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.

PDSCH/PUSCH Deletion

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be deleted, the Node B shall delete these new sets ~~to from~~ its PDSCH/PUSCH configuration.

In the successful case, the Node B shall add, modify and delete the PDSCH Sets and PUSCH Sets in the Common Transport Channel data base, as requested in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, and shall make these available to all the current and future DSCH and USCH transport channels; and The Node B shall respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.

8.2.18.3 Unsuccessful Operation

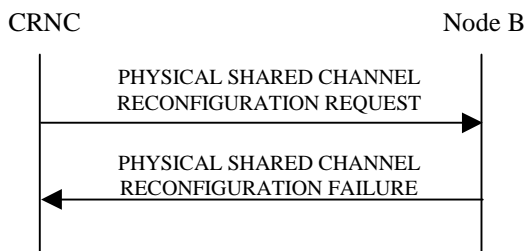


Figure 27: Physical Shared Channel Reconfiguration procedure: Unsuccessful Operation

If the Node B is not able to support all parts of the configuration, it shall reject the configuration of all the channels in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message. The Cause Value-IE shall be set to an appropriate value.

If the configuration was unsuccessful, the Node B shall respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell not available
- Node B Resources unavailable

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.18.4 Abnormal Conditions

-

8.2.19 Reset

8.2.19.1 General

The purpose of the Reset procedure is to align the resources in the CRNC and the Node B in the event of an abnormal failure. The CRNC or the Node B may initiate the procedure.

8.2.19.2 Successful Operation

8.2.19.2.1 Reset Initiated by the CRNC

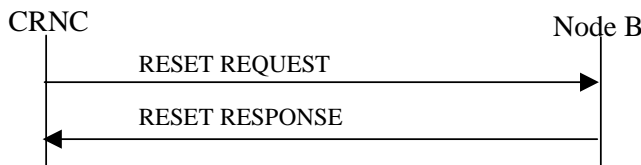


Figure 27A Reset procedure (CRNC to Node B), Successful Operation

The procedure is initiated with a RESET REQUEST message sent from the CRNC to the Node B **using the Node B Control Port**.

If the *Reset Indicator* IE is set to *Communication Context*, the Node B shall remove all the indicated Node B Communication Contexts (typically identified by a *Node B Communication Context ID* IE) and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

If the *Reset Indicator* IE is set to *Communication Control Port*, the Node B shall remove all the Node B Communication Contexts controlled via the indicated Communication Control Port(s) and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

If the *Reset Indicator* IE is set to *Node B*, the Node B shall remove all the Node B Communication Contexts within the Node B and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

8.2.19.2.2 Reset Initiated by the Node B

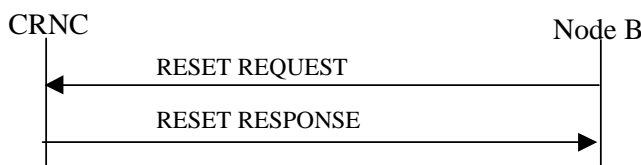


Figure 27B Reset procedure (Node B to CRNC), Successful Operation

The procedure is initiated with a RESET REQUEST message sent from the Node B to the CRNC **using the Node B Control Port**.

If the *Reset Indicator* IE is set to *Communication Context*, for all indicated CRNC Communication Contexts (indicated by a *CRNC Communication Context ID* IE), the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the indicated CRNC Communication Contexts. After clearing all related resources, the CRNC shall return the RESET RESPONSE message to the Node B.

If the *Reset Indicator* IE is set to *Communication Control Port*, for all the CRNC Communication Contexts controlled via the indicated Communication Control Port(s), the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the CRNC Communication Contexts controlled via the indicated Communication Control Port(s). After clearing all related resources, the CRNC shall return the RESET RESPONSE message to Node B.

If the *Reset Indicator* IE is set to the *Node B*, for all the CRNC Communication Contexts related to this Node B, the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the CRNC

Communication Contexts related to this Node B. After clearing all related resources, the CRNC shall return the RESET RESPONSE message to Node B.

8.2.19.3 Unsuccessful Operation

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8.2.19.4 Abnormal Conditions

If the RESET REQUEST message is received any ongoing procedure related to a CRNC Communication Context in the CRNC or Node B Communication Context in the Node B indicated (explicitly or implicitly) in the message shall be aborted.

8.2.20 Cell Synchronisation Initiation [TDD]

8.2.20.1 General

This procedure is used by a CRNC to request the transmission of cell synchronisation bursts and/or to start measurements on cell synchronisation bursts in a Node B.

8.2.20.2 Successful Operation

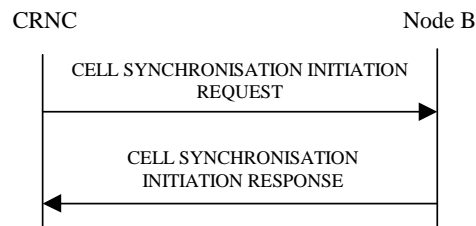


Figure 27C Cell Synchronisation Initiation procedure, Successful Operation

The procedure is initiated with a CELL SYNCHRONISATION INITIATION REQUEST message sent from the CRNC to the Node B using the Node B eControl pPort.

Upon reception, the Node B shall initiate the requested transmission according to the parameters given in the request and start the measurement on cell synchronisation bursts if requested.

Cell Sync Burst Transmission Initiation

When the Cell Sync Burst Transmission Initiation Information is present, the Node B shall configure the transmission of the cell synchronisation burst according to the parameters given in the CELL SYNCHRONISATION INITIATION REQUEST message. The SFN IE indicates the frame number when the cell shall start transmitting cell synchronisation bursts.

When the Cell Sync Burst Transmission Initiation Information is present and the "Frequency Acquisition" is indicated within the Synchronisation Report Type IE, the Node B shall first perform only frequency locking on received cell synchronisation bursts. Transmission of the indicated cell synchronisation bursts shall be started only if the frequency locking is performed successfully and "Frequency Acquisition completed" is reported to the RNC.

Cell Sync Burst Measurement characteristics

When the Cell Sync Burst Measurement Initiation Information is present, the Node B shall initiate measurements on the indicated cell synchronisation burst.

In case If the SFN IE is present, the Node B shall after measurement of the indicated cell synchronisation burst adjust the frame number of the indicated cell according to the SFN of the CELL SYNCHRONISATION INITIATION REQUEST message. This adjustment shall only apply to the late entrant cell at the late entrant phase.

Synchronisation Report characteristics

The Synchronisation Report Characteristics IE indicates how the reporting of the cell synchronisation burst

measurement shall be performed. Whenever the Cell Synchronisation Initiation procedure is initiated, only the "Frequency Acquisition completed" or "Frame related" report characteristic type shall apply.

If the *Synchronisation Report characteristics type* IE is set to "Frequency Acquisition completed", the Node B shall signal completion of frequency acquisition to the RNC when locking is completed.

If the *Synchronisation Report characteristics type* IE is set to "Frame related", the Node B shall report the result of the cell synchronisation burst measurement after every measured frame.

Response message

If the Node B was able to initiate the cell synchronisation burst transmission and/or measurement requested by the CRNC it shall respond with the CELL SYNCHRONISATION INITIATION RESPONSE message sent over the Node B eControl port.

8.2.20.3 Unsuccessful Operation

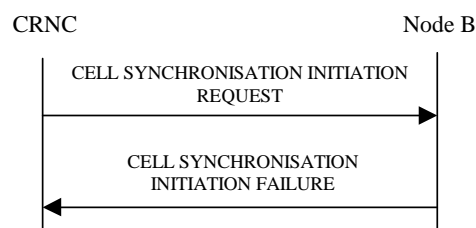


Figure 27D Cell Synchronisation Initiation procedure, Unsuccessful Operation

If the requested transmission or measurement on cell synchronisation bursts cannot be initiated, the Node B shall send a CELL SYNCHRONISATION INITIATION FAILURE message over the Node B control port. The message shall include the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell Synchronisation not supported
- Power level not supported
- Measurement Temporarily not Available
- Frequency Acquisition not supported

Miscellaneous Cause

- O&M Intervention
- HW failure

8.2.20.4 Abnormal Conditions

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8.2.21 Cell Synchronisation Reconfiguration [TDD]

8.2.21.1 General

This procedure is used by a CRNC to reconfigure the transmission of cell synchronisation bursts and/or to reconfigure measurements on cell synchronisation bursts in a Node B.

8.2.21.2 Successful Operation

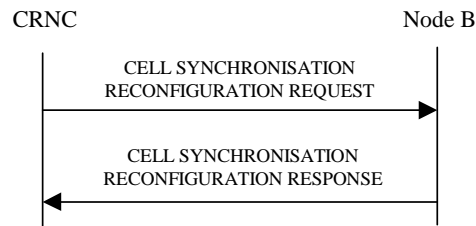


Figure 27E Cell Synchronisation Reconfiguration procedure, Successful Operation

The procedure is initiated with a CELL SYNCHRONISATION RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B eControl pPort.

Upon reception, the Node B shall reconfigure the cell synchronisation burst transmission and/or measurements according to the parameters given in the request.

Cell Sync Burst Schedule

Within the CELL SYNCHRONISATION RECONFIGURATION REQUEST message first the schedule for the steady state phase is fixed. I.e. the number of cycles per SFN period is defined with the same schedule. For each cycle, the number of repetitions is defined according to following equations:

Cycle length: $4096 / \text{value of } \textit{the-Number Of Cycles Per SFN Period IE-Number of cycles per SFN period}$

Repetition period: $\text{Cycle length} / \text{value of } \textit{Number Of Repetitions Per Cycle Period IE-Number of repetitions per cycle period}$

Cell Sync Frame number is calculated by:

$$\text{SFN} = \text{floor}((k-1) * \text{Cycle length} + (i-1) * \text{Repetition period})$$

$$k = \{1, 2, 4, \dots \text{Number of cycle per SFN period}\}$$

$$i = \{1, 2, 3, \dots \text{Cell Sync Frame number within cycle period}\}$$

Cell Sync Burst Transmission Reconfiguration

When the Cell Sync Burst Transmission Reconfiguration Information is present, the Node B shall reconfigure the transmission of the cell synchronisation burst according to the parameters given in the CELL SYNCHRONISATION RECONFIGURATION REQUEST message.

If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *Cell Sync Burst Code IE*, the Node B shall reconfigure the synchronisation code in the cell according to the *Cell Sync Burst Code IE* value.

If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *Cell Sync Burst Code shift IE*, the Node B shall reconfigure the synchronisation code shift in the cell according to the *Cell Sync Burst Code shift IE* value.

If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *DL #Transmission Power IE*, the Node B shall reconfigure the DL transmission power of the cell sync burst in the cell according to the *DL #Transmission Power IE* value.

Cell Sync Burst Measurement Reconfiguration

When the Cell Sync Burst Measurement Reconfiguration Information is present, the Node B shall reconfigure the cell synchronisation burst measurements according the parameters given in the message.

If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the Cell Sync Burst Measurement Information the measurements shall apply on the individual cell synchronisation bursts on the requested Sync Frame number.

If the *Synchronisation Report Type IE* is provided, the measurement reporting shall apply according the parameter given in the message.

Synchronisation Report characteristics

The *Synchronisation Report Characteristics* IE indicates how the reporting of the cell synchronisation burst measurement shall be performed.

If the *Synchronisation Report eCharacteristics #Type* IE is set to "Frame related", the Node B shall report the result of the cell synchronisation burst measurement after every measured frame.

If the *Synchronisation Report eCharacteristics #Type* IE is set to "SFN period related", the Node B shall report the result of the cell synchronisation burst measurements after every SFN period.

If the *Synchronisation Report eCharacteristics #Type* IE is set to "Cycle length related", the Node B shall report the result of the cell synchronisation burst measurements after every cycle length within the SFN period.

If the *Synchronisation Report eCharacteristics #Type* IE is set to "Threshold exceeding", the Node B shall report the result of the cell synchronisation burst measurement when the cell synchronisation burst timing rises or falls more than the requested threshold value compared to the arrival time in synchronised state which is represented by the *Cell Sync Burst Arrival Time* IE.

Response message

If the Node B was able to reconfigure the cell synchronisation burst transmission and/or measurement requested by the CRNC, it shall respond with the CELL SYNCHRONISATION RECONFIGURATION RESPONSE message sent over the Node B eControl pPort.

8.2.21.3 Unsuccessful Operation

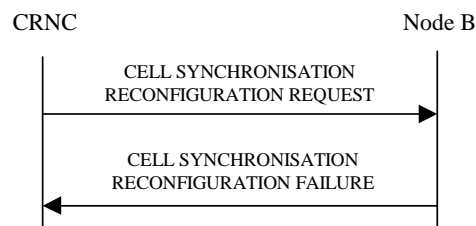


Figure 27F Cell Synchronisation Reconfiguration procedure, Unsuccessful Operation

If the Node B cannot reconfigure the requested transmission or measurement on cell synchronisation burst, the CELL SYNCHRONISATION RECONFIGURATION FAILURE message shall be sent to the CRNC. The message shall include the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell Synchronisation not supported
- Power level not supported
- Measurement Temporarily not Available

Miscellaneous Cause

- O&M Intervention
- HW failure

8.2.21.4 Abnormal Conditions

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8.2.22 Cell Synchronisation Reporting [TDD]

8.2.22.1 General

This procedure is used by a Node B to report the result of cell synchronisation burst measurements requested by the CRNC with the Cell Synchronisation Initiation or Cell Synchronisation Reconfiguration procedure.

8.2.22.2 Successful Operation

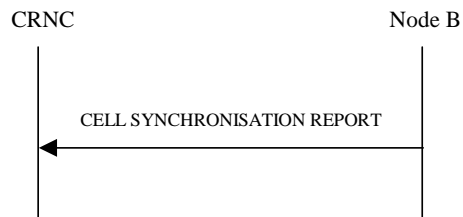


Figure 27G Cell Synchronisation Reporting procedure, Successful Operation

If the requested synchronisation measurement reporting criteria are met, the Node B shall initiate a Cell Synchronisation Reporting procedure. The CELL SYNCHRONISATION REPORT message shall use the Node B eControl pPort.

In the steady state phase when several cell synchronisation bursts shall be measured per Sync Frame number, the sequence of the reported measured values shall be the same as defined in the Cell Synchronisation Reconfiguration procedure.

If the achieved measurement accuracy does not fulfil the given accuracy requirement defined in [23], the Cell Sync Burst not available shall be reported.

8.2.22.3 Abnormal Conditions

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8.2.23 Cell Synchronisation Termination [TDD]

8.2.23.1 General

This procedure is used by the CRNC to terminate a cell synchronisation burst transmission or measurement previously requested by the Cell Synchronisation Initiation procedure or Cell Synchronisation Reconfiguration procedure.

8.2.23.2 Successful Operation



Figure 27H Cell Synchronisation Termination procedure, Successful Operation

This procedure is initiated with a CELL SYNCHRONISATION TERMINATION REQUEST message, sent from the CRNC to the Node B using the Node B eControl pPort.

Upon reception, the Node B shall terminate transmission of cell synchronisation bursts or reporting of cell synchronisation burst measurements corresponding to the CSB Transmission Id or CSB Measurement Id.

8.2.23.3 Abnormal Conditions

-

8.2.24 Cell Synchronisation Failure [TDD]

8.2.24.1 General

This procedure is used by the Node B to notify the CRNC that a synchronisation burst transmission or synchronisation measurement procedure can no longer be supported.

8.2.24.2 Successful Operation

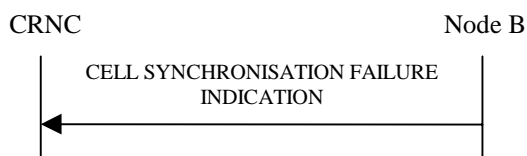


Figure 27I Cell Synchronisation Failure procedure, Successful Operation

This procedure is initiated with a CELL SYNCHRONISATION FAILURE INDICATION message, sent from the Node B to the CRNC using the Node B eControl pPort, to inform the CRNC that a previously requested transmission or measurement on cell synchronisation bursts can no longer be supported.

8.2.24.3 Abnormal Conditions

-

8.2.25 Cell Synchronisation Adjustment [TDD]

8.2.25.1 General

The purpose of Cell Synchronisation Adjustment procedure is to allow the CRNC to adjust the timing of the radio transmission of a cell within a Node B for time alignment.

8.2.25.2 Successful Operation

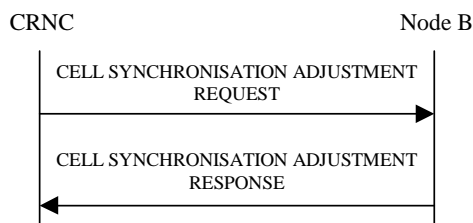


Figure 27J Cell Synchronisation Adjustment, Successful Operation

This procedure is initiated with a CELL SYNCHRONISATION ADJUSTMENT REQUEST message sent by the CRNC to the Node B using the Node B eControl pPort.

Upon reception, the Node B adjusts its timing according to the parameters given in the message.

If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *Frame Adjustment ν Value* IE the Node B shall apply the frame adjustment in the cell according to the *Frame Adjustment ν value* IE value.

If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *Timing Adjustment ν value* IE the Node B shall apply the timing adjustment in the cell according to the *Timing Adjustment ν value* IE value.

If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *DL Transmission Power* IE, the Node B shall apply the transmission power of the cell synchronisation burst according to the *DL Transmission Power* IE value.

If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *SFN* IE, the Node B shall apply the synchronisation adjustment starting with the SFN number indicated in the message.

When the cell synchronisation adjustment is successfully done by the Node B the Node B shall respond with a CELL SYNCHRONISATION ADJUSTMENT RESPONSE message.

8.2.25.3 Unsuccessful Operation

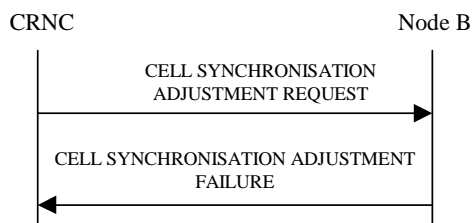


Figure 27K Cell Synchronisation Adjustment, Unsuccessful Operation

If the Node B cannot perform the indicated cell synchronisation adjustment due to hardware failure or other problem it shall send the CELL SYNCHRONISATION ADJUSTMENT FAILURE as a response.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell Synchronisation Adjustment not supported
- Power level not supported

Miscellaneous Cause

- O&M Intervention
- HW failure

8.2.25.4 Abnormal Conditions

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8.2.26 Information Exchange Initiation

8.2.26.1 General

This procedure is used by a CRNC to request the initiation of information provisioning from a Node B.

8.2.26.2 Successful Operation

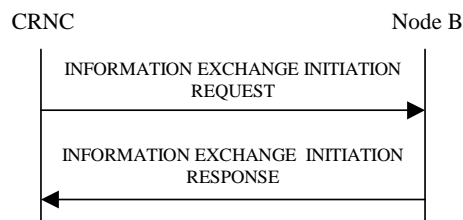


Figure 27L: Information Exchange Initiation procedure, Successful Operation

The procedure is initiated with the INFORMATION EXCHANGE INITIATION REQUEST message sent from the CRNC to the Node B using the Node B eControl pPort.

Upon reception, the Node B shall provide the requested information according to the *Information Type Item* IE. Unless specified below, the meaning of the parameters are given in other specifications.

Information Report Characteristics

The *Information Report Characteristics* IE indicates how the reporting of the information shall be performed.

If the *Information Report Characteristics* IE is set to "On Demand", the Node B shall report the requested information immediately.

If the *Information Report Characteristics* IE is set to "Periodic", the Node B shall periodically initiate the Information Reporting procedure for all the requested information, with the requested reporting frequency.

If the *Information Report Characteristics* IE is set to "On Modification", the Node B shall immediately report the requested information and then shall initiate the Information Reporting procedure in accordance to the following conditions related to the *Information Type* IE:

- 1) If the *Information Type Item* IE is set to "DGPS Corrections", the Node B shall initiate the Information Reporting procedure when either the PRC has drifted from the previously reported value more than the threshold indicated in the *PRC Deviation* IE or a change has occurred in the IODE.
- 2) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Navigation Model & Time Recovery", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred regarding either the IODC or the list of visible satellites, identified by the *SatID* IEs.
- 3) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Ionospheric Model", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- 4) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS UTC Model", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred in the *t_ot* parameter.
- 5) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Almanac", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- 6) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Real-Time Integrity", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.

Response message

If the Node B was able to initiate the information provision requested by the CRNC, it shall respond with the INFORMATION EXCHANGE INITIATION RESPONSE message sent over the Node B eControl pPort. The message shall include the same Information Exchange ID that was included in the INFORMATION EXCHANGE REQUEST message. When the *Report Characteristics* IE is set to "On Demand" or "On Modification" or "Periodic", the INFORMATION EXCHANGE INITIATION RESPONSE message shall contain the requested data.

8.2.26.3 Unsuccessful Operation

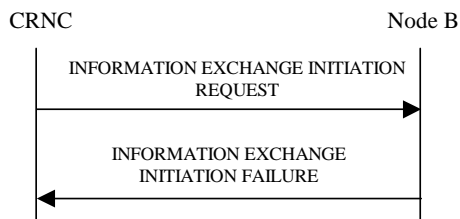


Figure 27M: Information Exchange Initiation procedure, Unsuccessful Operation

If the Information Type Item received in the *Information Type Item* IE indicates a type of information that cannot be provided, the Node B shall regard the Information Exchange Initiation procedure as failed.

If the requested information provision cannot be initiated, the Node B shall send the INFORMATION EXCHANGE INITIATION FAILURE message over the Node B eControl pPort. The message shall include the same Information Exchange ID that was used in the INFORMATION EXCHANGE INITIATION REQUEST message and the Cause IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Information temporarily not available.
- Information Provision not supported for the object.

8.2.27.4 Abnormal Conditions

If the *Information Report Characteristics* IE is set to "On Modification", and the *Information Type Item* IE is set to "DGPS Corrections", but the *Information Threshold* IE is not received in the INFORMATION EXCHANGE INITIATION REQUEST message, the Node B shall regard the Information Exchange Initiation procedure as failed.

8.2.27 Information Reporting

8.2.27.1 General

This procedure is used by a Node B to report the information requested by the CRNC with the Information Exchange Initiation procedure.

8.2.27.2 Successful Operation

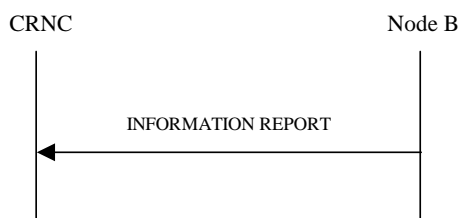


Figure 27N: Information Reporting procedure, Successful Operation

If the requested information reporting criteria are met, the Node B shall initiate the Information Reporting procedure. The INFORMATION REPORT message shall use the Node B eControl pPort. Unless specified below, the meaning of the parameters are given in other specifications.

The *Information Exchange ID* IE shall be set to the Information Exchange ID provided by the CRNC when initiating the Information Exchange with the Information Exchange Initiation procedure.

The *Requested Data Value* IE shall include at least one IE containing the data to be reported.

8.2.27.3 Abnormal Conditions

-

8.2.28 Information Exchange Termination

8.2.28.1 General

This procedure is used by the CRNC to terminate the provision of information previously requested by the Information Exchange Initiation procedure.

8.2.28.2 Successful Operation



Figure 27O: Information Exchange Termination procedure, Successful Operation

This procedure is initiated with an INFORMATION EXCHANGE TERMINATION REQUEST message, sent from the CRNC to the Node B using the Node B *eControl pPort*.

Upon reception, the Node B shall terminate the provision of information corresponding to the Information Exchange ID.

8.2.28.3 Abnormal Conditions

-

8.2.29 Information Exchange Failure

8.2.29.1 General

This procedure is used by the Node B to notify the CRNC that information previously requested by the Information Exchange Initiation procedure can no longer be reported.

8.2.29.2 Successful Operation

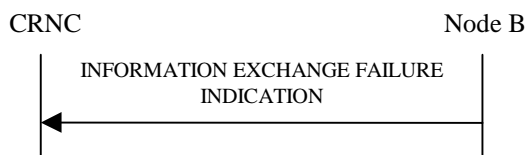


Figure 27P: Information Exchange Failure procedure, Successful Operation

This procedure is initiated with the INFORMATION EXCHANGE FAILURE INDICATION message, sent from the Node B to the CRNC using the Node B *eControl pPort*, to inform the CRNC that information previously requested by the Information Exchange Initiation procedure can no longer be reported. The message shall include the same Information Exchange ID that was used in the INFORMATION EXCHANGE INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

8.3 NBAP Dedicated Procedures

8.3.1 Radio Link Addition

8.3.1.1 General

This procedure is used for establishing the necessary resources in the Node B for one or more additional RLs towards a UE when there is already a Node B *e*C_{ommunication} *e*C_{ontext} for this UE in the Node B.

The Radio Link Addition procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.1.2 Successful Operation

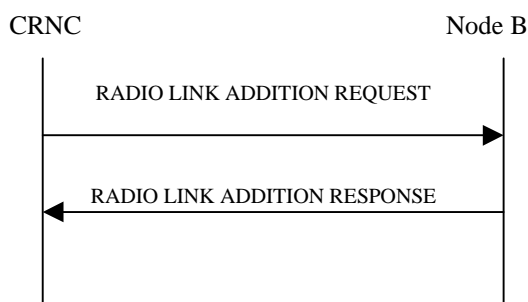


Figure: 28 Radio Link Addition procedure, Successful Operation

The procedure is initiated with a RADIO LINK ADDITION REQUEST message sent from the CRNC to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon reception, the Node B shall reserve the necessary resources and configure the new RL(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be established according to Annex A.

Physical Channels Handling:

[TDD – If the *UL DPCH Information* IE is present, the Node B shall configure the new UL DPCH(s) according to the parameters given in the message.]

[TDD – If the *DL DPCH Information* IE is present, the Node B shall configure the new DL DPCH(s) according to the parameters given in the message.]

[FDD – Compressed Mode]:

[FDD – If the RADIO LINK ADDITION REQUEST *message* includes the *Compressed Mode Deactivation Flag* IE with value "Deactivate", the Node B shall not activate any compressed mode pattern in the new RLs. In all the other cases (Flag set to "Maintain Active" or not present), the ongoing compressed mode (if existing) shall be applied also to the added RLs.]

[FDD- If the RADIO LINK ADDITION REQUEST *message* contains the *Transmission Gap Pattern Sequence Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated for each DL Channelisation Code for which the *Transmission Gap Pattern Sequence Code Information* IE is set to "Code Change".]

[FDD – DL Code Information]:

[FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to ref. [8]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the *p*th to "*PhCH number p*".]

[TDD – CCTrCH Handling]:

[TDD – If the *UL CCTrCH Information* IE is present, the Node B shall configure the new UL CCTrCH(s) according to the parameters given in the message.]

[TDD – If the *DL CCTrCH Information* IE is present, the Node B shall configure the new DL CCTrCH(s) according to the parameters given in the message.]

Radio Link Handling:**Diversity Combination Control:**

The *Diversity Control Field* IE indicates for each RL whether the Node B shall combine the new RL with existing RL(s) or not.

- If the *Diversity Control Field* IE is set to "May", the Node B shall decide for any of the alternatives.

- If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL.

- If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.

When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with. ~~If the *Diversity Control Field* IE is set to "Must not" the Node B shall not combine the RL with any other existing RL.~~

In the case of combining an RL with existing RL(s), the Node B shall indicate **with the Diversity Indication in the *RL Information Response* IE** in the RADIO LINK ADDITION RESPONSE message **with the Diversity Indication** that the RL is combined. In this case, the ***RL ID* IE Reference RL ID shall be included to indicate** one of the existing RLs that the new RL is combined with.

In the case of not combining an RL with existing RL(s), the Node B shall indicate **with the Diversity Indication in the *RL Information Response* IE** in the RADIO LINK ADDITION RESPONSE message **with the Diversity Indication** that no combining is done. In this case, the Node B shall include **in the *DCH Information Response* IE** both the ***Transport Layer Address* IE Transport Layer Address** and the ***Binding ID* IE binding ID** for the transport bearer to be established for each DCH, [TDD – DSCH, USCH] of the RL in the RADIO LINK ADDITION RESPONSE message.

In the case of **a set of** co-ordinated DCHs, the ***Binding ID* IE binding ID** and the ***Transport Layer Address* IE transport address** shall be included for only one of the **DCHs in a set of** coordinated DCHs.

[TDD – The Node B shall include in the RADIO LINK ADDITION RESPONSE message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DSCH and USCH.]

[FDD – Transmit Diversity]:

[FDD – When the *Diversity Mode* IE is **set to** "STTD", "Closedloop mode1", or "Closedloop mode2", the Node B shall activate/deactivate the Transmit Diversity ~~to~~**for** each Radio Link in accordance with the *Transmit Diversity Indication* IE.]

[FDD – When the *Transmit Diversity Indicator* IE is present, the Node B shall activate/deactivate the Transmit Diversity ~~to~~**for** each new Radio Link in accordance with the *Transmit Diversity Indicator* IE and the already known diversity mode.]

DL Power Control:

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall apply the given power to the transmission on each DL DPCH of the RL when starting transmission until either UL synchronisation on the Uu **interface** is achieved for the RLS or Power Balancing is activated. If no *Initial DL Transmission Power* IE is included, the Node B shall use any transmission power level currently used on already existing RL's for this **Node B Communication Context**. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) with DPC MODE currently configured for the relevant Node B Communication Context and the downlink power control procedure (see **subclause 8.3.7**).]

[TDD – If the RADIO LINK ADDITION REQUEST message includes the [3.84Mcps TDD - *Initial DL Transmission Power* IE] [1.28Mcps TDD – *DL Time Slot ISCP Info LCR* IE], the Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the RL when starting transmission until the UL synchronisation on the Uu [interface](#) is achieved for the RL. If no *Initial DL Transmission pPower* IE is included, the Node B shall use any transmission power level currently used on already existing RL's for this [Node B Communication ContextUE](#). No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]

If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL pPower* IE, the Node B shall store this value and not transmit with a higher power on any DL DPCH of the RL. If no *Maximum DL pPower* IE is included, any Maximum DL power stored for already existing RLs for this [Node B Communication ContextUE](#) shall be applied. [FDD - During compressed mode, the $P_{STR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]

If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL pPower* IE, the Node B shall store this value and never transmit with a lower power on any DL DPCH of the RL. If no *Minimum DL pPower* IE is included, any Minimum DL power stored for already existing RLs for this [Node B Communication ContextUE](#) shall be applied.

[TDD – If the RADIO LINK ADDITION REQUEST message includes the *DL Time Slot ISCP Info* IE, the Node B shall use the indicated value when deciding the DL TX Power for each timeslot as specified in ref. [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged].

General:

[FDD – If the RADIO LINK ADDITION REQUEST message contains an *SSDT Cell Identity* IE, the Node B shall activate SSDT, if supported, for the concerned new RL, with the indicated SSDT cell identity used for that RL.]

[The Node B shall start reception on the new RL\(s\) after the RLs are successfully established.](#)

[FDD – Radio Link Set Handling]:

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication [eContext](#).]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another new or existing RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication [eContext](#).]

[FDD – After addition of the new RL(s), the UL out-of-sync algorithm defined in [10] shall, for each of the previously existing and newly established RL Set(s), use the maximum value of the parameters $N_{OUTSYNC_IND}$ and $T_{RLFAILURE}$, and the minimum value of the parameters N_{INSYNC_IND} , that are configured in the cells supporting the radio links of the RL Set. [The UL in-sync algorithm defined in \[10\] shall, for each of the established RL Set\(s\), use the minimum value of the parameters \$N_{INSYNC_IND}\$, that are configured in the cells supporting the radio links of the RL Set.](#)]

Response Message:

If all requested RLs are successfully added, the Node B shall respond with a RADIO LINK ADDITION RESPONSE message.

After sending of the RADIO LINK ADDITION RESPONSE message, the Node B shall continuously attempt to obtain UL synchronisation on the Uu [interface](#) and [start reception on the new RL](#). [FDD – The Node B shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16].] [TDD – The Node B shall start transmission on the new RL immediately as specified in [16].]

8.3.1.3 Unsuccessful Operation

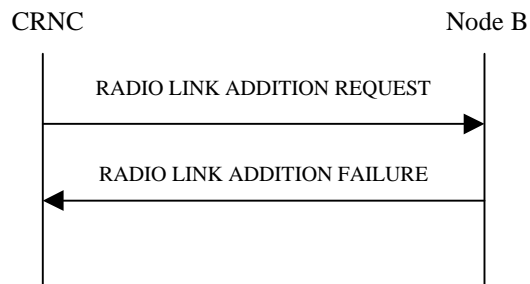


Figure 29: Radio Link Addition procedure: Unsuccessful Operation

If the establishment of at least one radio link is unsuccessful, the Node B shall respond with a RADIO LINK ADDITION FAILURE message. The message contains the failure cause in the Cause IE.

[FDD - If some RL(s) were established successfully, the Node B shall indicate this in the RADIO LINK ADDITION FAILURE message in the same way as in the RADIO LINK ADDITION RESPONSE message.]

[FDD – If the RADIO LINK ADDITION REQUEST contains a C-ID IE indicating that a Radio Link must be established on a Cell where DPC Mode change is not supported and DPC Mode can be changed for the relevant Node B Communication Context, the Node B shall consider the procedure as failed for the concerned Radio Link and shall respond with a RADIO LINK ADDITION FAILURE with the appropriate cause value (“DPC Mode change not supported”).]

Typical cause values are as follows:

Radio Network Layer Cause

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- UL SF not supported
- DL SF not supported
- Reconfiguration CFN not elapsed
- CM not supported
- [FDD – DPC Mode change not supported]

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.1.4 Abnormal conditions

[FDD – If the RADIO LINK ADDITION REQUEST message contains the Compressed Mode Deactivation Flag IE with the value "Deactivate" when compressed mode is active for the existing RL(s), and at least one of the new RL is added in a cell that has the same UARFCN (both UL and DL) of at least one cell with an already existing RL, the Node B shall regard the Radio Link Addition procedure as failed and shall respond with a RADIO LINK ADDITION FAILURE message with the cause value "Invalid CM settings".]

8.3.2 Synchronised Radio Link Reconfiguration Preparation

8.3.2.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one **UE-UTRAN connection within a Node B Communication Context**.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.2.2 Successful Operation

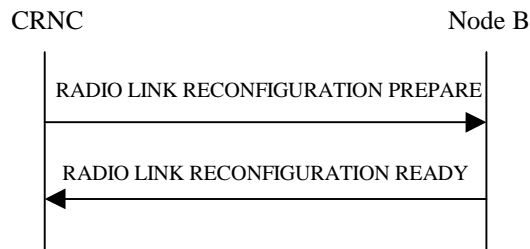


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the CRNC by sending the **message RADIO LINK RECONFIGURATION PREPARE message** to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Modify IEs* then the Node B shall treat them each as follows:

- If the *DCHs to Modify IE* includes the *Frame Handling Priority IE*, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs to Modify IE* includes the *Transport Format Set IE* for the UL of a DCH, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs to Modify IE* includes the *Transport Format Set IE* for the DL of a DCH, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs to Modify IE* includes multiple *DCH Specific Info IEs*, then the Node B shall treat the DCHs in the *DCHs to Modify IE* as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs to Modify IE* includes the *UL FP Mode IE* for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify IE* includes the *ToAWS IE* for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

- If the *DCHs to Modify* IE includes the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new *ToAWE* in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the Downlink of this DCH in the new configuration.]
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Add* IE includes multiple *DCH sSpecific Info* IEs ~~then~~, the Node B shall treat the DCHs in the *DCHs to Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector IE QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD – If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have the *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE, ref. [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received *Frame Handling Priority* should be used when prioritising between different frames in the downlink on the *radio-Uu* interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Delete* IEs, the Node B shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of co-ordinated DCHs in the new configuration.

Physical Channel Modification:

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *UL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPDCCHs* IE (if it is included) in the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]
- [FDD – If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD – The Node B shall use the *TFCS* IE for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL DPCCCH Slot Format* IE, the Node B shall set the new Uplink DPCCCH Structure to the new configuration.]
- [FDD - If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the Node B shall apply diversity according to the given value.]
- [FDD – If the *UL DPCH Information* IE includes an *SSDT Cell Identity Length* IE and/or an *S-Field Length* IE, the Node B shall apply the values in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – The Node B shall use the *TFCS* IE for the DL (if it is present) when reserving resources for the downlink of the new configuration. The Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE or the *TFCI Presence* IE, the Node B shall use the information when building TFCIs in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *DL DPCCCH Slot Format* IE, group the Node B shall set the new Downlink DPCCCH Structure to the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the Node B shall apply the indicated multiplexing type in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to "Not Used", the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH eCode mMapping* IE, then the Node B shall apply the defined mapping between TFCI values and PDSCH channelisation codes.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH RL ID* IE, then the Node B shall infer that the PDSCH for the specified user will be transmitted on the defined radio link.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Modify* or *DL CCTrCH to Modify* IEs, then the Node B shall treat them each as follows:]

- [TDD – If the IE includes any of the *TFCS* IE, *TFCI coding* IE or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]

- [TDD – If the IE includes any *UL DPCH #T_o #Add IE* or *DL DPCH #T_o #Add IEs*, the Node B shall include this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH #T_o #Delete IE* or *DL DPCH #T_o #Delete IEs*, the Node B shall remove this DPCH in the new configuration.]
- [TDD – If the IE includes any ~~*UL DPCH #T_o #Modify IE*~~ or ~~*DL DPCH #T_o #Modify IEs*~~, and includes any of ~~*the Repetition Period IE*~~, ~~*Repetition Length IE₁*~~, or ~~*TDD DPCH Offset IE₂*~~, or the message includes UL/DL Timeslot Information and includes any of ~~*the [3.84Mcps TDD - #3.84Mcps TDD – Midamble #Shift #And Burst Type IE*~~, ~~*Time Slot IE*~~, [1.28Mcps TDD - ~~*Midamble #Shift LCR IE*~~, ~~*Time Slot LCR IE*~~], or ~~*TFCI #Presence IE*~~ or the message includes UL/DL Code information and includes [3.84Mcps TDD - ~~*TDD Channelisation Code IE*~~, [1.28Mcps TDD - ~~*TDD Channelisation Code LCR IE*~~], the Node B shall apply these specified information elements as the new values, otherwise the old values specified for this DPCH configuration are still applicable.]
- [1.28Mcps TDD – If the *UL CCH #T_o Modify IE* includes the *UL SIR Target IE*, the Node B shall use the value for the UL inner loop power control according [19] and [21] when the new configuration is being used.]

[TDD – UL/DL CCH Addition]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCH #T_o Add IE* or *DL CCH #T_o Add IE*, the Node B shall include this CCH in the new configuration.]

[TDD – If the *UL/DL CCH #T_o Add IE* includes any *UL/DL DPCH Information IE*, the Node B shall reserve necessary resources for the new configuration of the UL/DL DPCH(s) according to the parameters given in the message.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL CCH #T_o Add IE*, the Node B shall set the TPC step size of that CCH to the same value as the lowest numbered DL CCH in the current configuration.]

[1.28Mcps TDD – The Node B shall use the *UL SIR Target IE* in the *UL CCH #T_o Add IE* as the UL SIR value for the inner loop power control for this CCH according [19] and [21] in the new configuration.]

[TDD – UL/DL CCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any UL or DL CCH to be deleted, the Node B shall remove this CCH in the new configuration.]

DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH #T_o Add/modify*, *DSCH #T_o Modify/add* or *DSCH #T_o #Delete IEs*, then the Node B shall use this information to add/modify/delete the indicated DSCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address IE* and the *Binding ID IE* for the transport bearer to be established for each DSCH.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Information IE₁*, then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signalling control frames shall be received if one does not already exist or shall apply the new values if such a bearer does already exist. The *Binding ID IE* and *Transport Layer Address IE* of any new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message. If the RADIO LINK RECONFIGURATION PREPARE message specifies that the TFCI2 transport bearer is to be deleted, then the Node B shall release the resources associated with that bearer in the new configuration.]

[FDD – If the *TFCI Signalling Mode IE* within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI field but a TFCI2 transport bearer has not already been set up and *TFCI2 Bearer Information IE* is not included in the message, then the Node B shall transmit the TFCI2 field with zero power in the new configuration.]

[FDD – If the *TFCI Signalling Mode IE* within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information IE* is included in the message, then the Node B shall transmit the TFCI2 field with zero power until Synchronisation is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer in the new configuration (see ref. [24]).]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *DSCH Common Information-~~IE~~* ~~IE~~, the Node B shall treat it as follows:]

- [FDD - If the *Enhanced DSCH PC Indicator* IE is included and set to "Enhanced DSCH PC Active in the UE ", the Node B shall activate enhanced DSCH power control in accordance with ref. [10] subclause 5.2.2, if supported, using either:]
- [FDD - the *SSDT Cell Identity for EDSCHPC* IE in the *RL Information* IE, if the *SSDT Cell Identity* IE is not included in the *RL Information* IE or]
- [FDD - the *SSDT Cell Identity* IE in the *RL Information* IE, if both the *SSDT Cell Identity* IE and the *SSDT Cell Identity for EDSCHPC* IE are included in the *RL Information* IE.]

[FDD - together with the *SSDT Cell Identity Length* IE in *UL DPCH Information* IE, and *Enhanced DSCH PC* IE, in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Enhanced DSCH PC Indicator* IE set to "Enhanced DSCH PC not Active in the UE", the Node B shall deactivate enhanced DSCH power control in the new configuration.]

[TDD – USCH Addition/Modification/Deletion:]

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]
- [TDD – The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each USCH.]

RL Information:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B may activate SSDT using the *SSDT Cell Identity* IE in the new configuration.]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the Node B shall deactivate SSDT in the new configuration.]
- [FDD – If the *RL Information* IE includes a *DL Code Information* IE, the Node B shall apply the values in the new configuration.]
- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- If the *RL Information* IE includes the *Maximum DL Power* and/or the *Minimum DL Power* IEs, the Node B shall apply the values in the new configuration. [FDD - During compressed mode, the $P_{SIR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k .]
- [TDD – If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall apply the given power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu [interface](#) is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included with a new CCTrCH, the Node B shall use any transmission power level currently used on already existing CCTrCHs when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]

General

If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exists a Prepared Reconfiguration, as defined in subclause 3.1.

In the RADIO LINK RECONFIGURATION READY message, the Node B shall include the *RL Information Response* IE for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* *Transport Layer Address* and the *Binding ID* for any Transport Channel being added; or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator IE*.

In case of a DCH requiring a new transport bearer on Iub, the *Transport Layer Address IE* and the *Binding ID IE* shall be included in the *IE DCH Information Response IE*.

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iub interface, the *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* shall be included only for one of the DCH in the set of co-ordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the Node B, the *RL Information Response IE* shall be included only for one of the combined RLS. The *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* shall be included only for one of the combined Radio Links.

8.3.2.3 Unsuccessful Operation

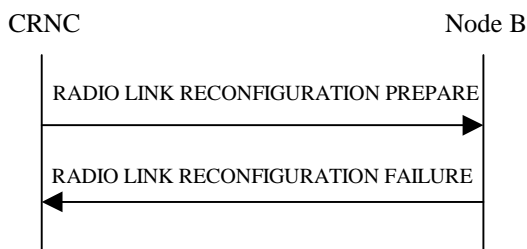


Figure 31: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

If the Node B cannot reserve the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be added, it shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed.

If the requested Synchronised Radio Link Reconfiguration Preparation procedure fails for one or more RLS, the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

Radio Network Layer Cause

- UL SF not supported
- DL SF not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- Number of DL codes not supported
- Number of UL codes not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.2.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and ~~the Node B~~ shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE" and SSDT is not active in the current configuration, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed if the *UL DPCH Information* IE does not include the *SSDT Cell Identity Length* IE. In this case, it shall respond with a RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message includes a *DCHs \uparrow To Modify* IE or *DCHs \uparrow To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs \uparrow To Modify* IE or *DCHs \uparrow To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP RECONFIGURATION FAILURE message.

8.3.3 Synchronised Radio Link Reconfiguration Commit

8.3.3.1 General

This procedure is used to order the Node B to switch to the new configuration for the Radio Link(s) within the Node B, previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure.

The message shall use the Communication Control Port assigned for this Node B Communication Context.

8.3.3.2 Successful Operation

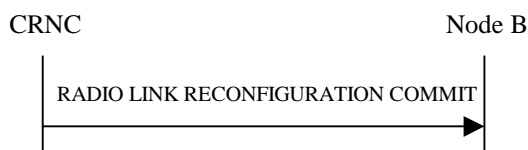


Figure 32: Synchronised Radio Link Reconfiguration Commit procedure, Successful Operation

The Node B shall switch to the new configuration previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure at the next coming CFN with a value equal to the value requested by the CRNC in the *CFN* IE when receiving the RADIO LINK RECONFIGURATION COMMIT message from the CRNC.

[FDD – If the *Active Pattern Sequence Information* IE is included in the RADIO LINK RECONFIGURATION COMMIT message, the *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE shall be ignored by the Node B.]

When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

In the case of a transport channel modification for which a new transport bearer was requested and established, the switch to the new transport bearer shall also take place at the indicated CFN. The detailed frame protocol handling during transport bearer replacement is described in [16], ~~section-subclause~~ 5.10.1 and in [24], subclause 5.8.2.

[FDD – If the RADIO LINK RECONFIGURATION COMMIT includes the *Active Pattern Sequence Information* IE, the Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the *CFN* IE. From that moment on, all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions shall be started when the indicated *TGCFN* IE elapses. The *CFN* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value. If the values of the *CFN* IE and the *TGCFN* IE are equal, the concerned Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CFN* IE.]

8.3.3.3 Abnormal Conditions

If a new transport bearer is required for the new reconfiguration and it is not available at the requested CFN, the Node B shall initiate the Radio Link Failure procedure.

8.3.4 Synchronised Radio Link Reconfiguration Cancellation

8.3.4.1 General

This procedure is used to order the Node B to release the new configuration for the Radio Link(s) within the Node B, previously prepared by the Synchronised Radio Link Preparation Reconfiguration procedure.

The message shall use the Communication Control Port assigned for this Node B Communication Context.

8.3.4.2 Successful Operation

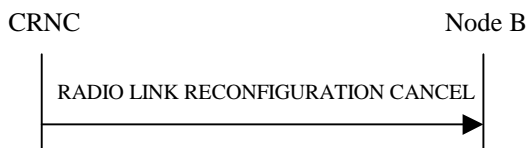


Figure 33: Synchronised Radio Link Reconfiguration Cancellation procedure, Successful Operation

When receiving the RADIO LINK RECONFIGURATION CANCEL message from the CRNC, the Node B shall release the new configuration ([FDD - including the new Transmission Gap Pattern Sequence parameters (if existing)]) previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure and continue using the old configuration. When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

8.3.4.3 Abnormal Conditions

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8.3.5 Unsynchronised Radio Link Reconfiguration

8.3.5.1 General

The Unsynchronised Radio Link Reconfiguration procedure is used to reconfigure Radio Link(s) related to one UE-UTRAN connection within a Node B.

The Unsynchronised Radio Link Reconfiguration procedure is used when there is no need to synchronise the time of the switching from the old to the new configuration in one Node B used for a UE-UTRAN connection with any other Node B also used for the UE-UTRAN connection.

The Unsynchronised Radio Link Reconfiguration procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.5.2 Successful Operation

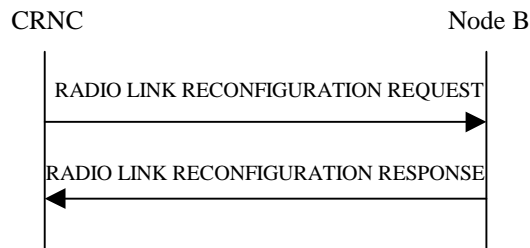


Figure 34: Unsynchronised Radio Link Reconfiguration Procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the CRNC by sending the **message** RADIO LINK RECONFIGURATION REQUEST **message** to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs \neq To Modify* IEs then the Node B shall treat them each as follows:

- If the *DCHs \neq To Modify* IE includes ~~on~~ the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the **radio-Uu** interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs \neq To Modify* IE includes the *Transport Format Set* IE for the UL, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs \neq To Modify* IE includes the *Transport Format Set* IE for the DL, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs \neq To Modify* IE includes multiple *DCH Specific Info* IEs, then the Node B shall treat the DCHs in the *DCHs \neq To Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs \neq To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs \neq To Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs \neq To Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCH #To Add* IEs, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCHs in the new configuration. In particular:

- If a *DCHs #To Add* IE includes multiple *DCH Specific Info* IEs for a DCH to be added, the Node B shall treat the DCHs in the *DCHs #To Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD - For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Node B shall use the Transport channel BER from that DCH as the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If the *QE-Selector IE* ~~*QE-Selector*~~ is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Node B shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" as the QE in the UL data frames [16]. [FDD – If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If all DCHs have the *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the *radio-Uu* interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be **added/modified**, the Node B shall apply the new CCTrCH ID in the downlink of this DCH in the new configuration.]
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be **added/modified**, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the Node B shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of co-ordinated DCHs in the new configuration.

[FDD - Physical Channel Modification:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *UL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *UL DPCH Information* IE includes the *TFCS* IE for the UL, the Node B shall apply the new TFCS in the Uplink of the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes a *DL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *DL DPCH Information* IE includes on the *TFCS* IE for the DL, the Node B shall apply the new TFCS in the Downlink of the new configuration.]

- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE, the Node B shall use the use the information when building TFCIs in the new configuration.
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE message includes the *Limited Power Increase* IE and the IE is set to "Not Used", the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH #To #Modify* IE or *DL CCTrCH #To #Modify* IE in the Radio Link(s), the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message.]

[TDD – If the *UL/DL CCTrCH #To #Modify* IE includes *TFCS* IE, and/or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH #To #Delete* IE or *DL CCTrCH #To #Delete* IE, the Node B shall not include this CCTrCH in the new configuration.]

RL Information:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Information* IE, the Node B shall treat it as follows:

- If the *RL Information* IE includes the *Maximum DL Power* IE, the Node B shall apply this value to the new configuration and not transmit with a higher power on any Downlink DPCH of the Radio Link once the new configuration is being used. [FDD - During compressed mode, the $P_{STR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]
- If the *RL Information* IE includes the *Minimum DL Power* IE, the Node B shall apply this value to the new configuration and never transmit with a lower power on any Downlink Channelisation Code of the Radio Link once the new configuration is being used.
- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]

General

If the requested modifications are allowed by the Node B, the Node B has successfully allocated the required resources, and changed to the new configuration, it shall respond to the CRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

In the RADIO LINK RECONFIGURATION RESPONSE message, the Node B shall include the *RL Information Response* IE for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. The detailed frame protocol handling during transport bearer replacement is described in [16], [section subclause 5.10.1](#).

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iub interface, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the DCH in the set of coordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the Node B, the *RL Information Response* IE shall be included only for one of the combined Radio Links. The *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

8.3.5.3 Unsuccessful Operation

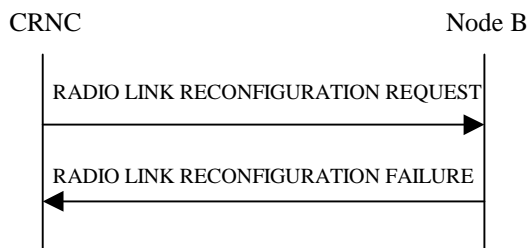


Figure 35: Unsyncronised Radio Link Reconfiguration procedure, Unsuccessful Operation

If the Node B cannot allocate the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be set-up, it shall regard the Unsyncronised Radio Link Reconfiguration procedure as having failed.

If the requested Unsyncronised Radio Link Reconfiguration procedure fails for one or more Radio Link(s), the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

Radio Network Layer Cause

- CM not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.5.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Unsyncronised Radio Link Reconfiguration procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

[FDD – If the *RL Information* IE contains the *DL Code Information* IE and this IE includes *DL Scrambling Code* and *FDD DL Channelisation Code Number* IEs not matching the DL Channelisation code(s) already allocated to the Radio Link identified by *RL ID* IE, then the Node B shall consider the Unsyncronised Radio Link Reconfiguration procedure as having failed and it shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Unsyncronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes a *DCHs #To Modify* IE or *DCHs #To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs #To Modify* IE or *DCHs #To Add* IE do not have the

same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK **SETUP-RECONFIGURATION FAILURE** message.

8.3.6 Radio Link Deletion

8.3.6.1 General

The Radio Link Deletion procedure is used to release the resources in a Node B for one or more established radio links towards a UE.

The Radio Link Deletion procedure may be initiated by the CRNC at any time when the Node B Communication Context exists.

8.3.6.2 Successful Operation

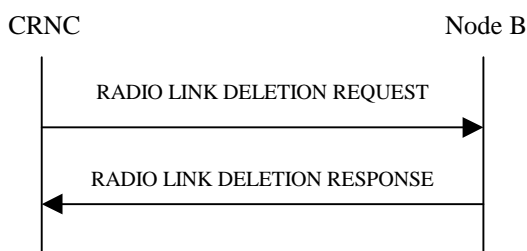


Figure 36: Radio Link Deletion procedure, Successful Operation

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the CRNC to the Node B **using the Communication Control Port assigned to the concerned Node B Communication Context.**

Upon receipt of this message, the Node B shall delete the radio link(s) identified by the *RL ID* IE, *Node B Communication ID* IE ~~and~~ *CRNC Communication ID* IE and release all associated resources and respond to the CRNC with a RADIO LINK DELETION RESPONSE message.

[FDD – After deletion of the RL(s), the UL out-of-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the maximum value of the parameters *N_OUTSYNC_IND* and *T_RLFAILURE*, ~~and the minimum value of the parameters *N_INSYNC_IND*~~, that are configured in the cells supporting the radio links of the RL Set ~~and the UL in-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the minimum value of the parameters *N_INSYNC_IND* that are configured in the cells supporting the radio links of the RL Set~~].

8.3.6.3 Unsuccessful Operation

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8.3.6.4 Abnormal Conditions

If the RL indicated by the *RL ID* IE, *Node B Communication ID* IE and *CRNC Communication ID* IE does not exist, the Node B shall respond with the RADIO LINK DELETION RESPONSE message and use the *CRNC Communication Context ID* IE received in the RADIO LINK DELETION REQUEST message.

8.3.7 Downlink Power Control [FDD]

8.3.7.1 General

The purpose of this procedure is to balance the DL transmission powers of one or more Radio Links used for the related UE-UTRAN connection within the Node B. The Downlink Power Control procedure may be initiated by the CRNC at any time when the Node B *e*Communication *e*Context exists, irrespective of other ongoing CRNC initiated dedicated NBAP procedures towards this Node B *e*Communication *e*Context. The only exception occurs when the CRNC has requested the deletion of the last RL via this Node B, in which case the Downlink Power Control procedure shall no longer be initiated.

8.3.7.2 Successful Operation



Figure 37: Downlink Power Control procedure, Successful Operation

The procedure is initiated by the CRNC sending a DL POWER CONTROL REQUEST message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

The *Power Adjustment Type* IE defines the characteristic of the power adjustment.

If the value of the *Power Adjustment Type* IE is *Common* "Common", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "Common". As long as the Power Balancing Adjustment Type of the Node B Communication Context is set to "Common", the Node B shall perform the power adjustment (see below) for all existing and future radio links associated with the context identified by the *Node B Communication Context ID* IE and use a common DL reference power level.

If the value of the *Power Adjustment Type* IE is *Individual* "Individual", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "Individual". The Node B shall perform the power adjustment (see below) for all radio links addressed in the message using the given DL Reference Powers per RL. If the Power Balancing Adjustment Type of the Node B Communication Context was set to "Common" before this message was received, power balancing on all radio links not addressed by the DL POWER CONTROL REQUEST message shall remain to be executed in accordance with the existing power balancing parameters which are now considered RL individual parameters. Power balancing will not be started on future radio links without a specific request.

If the value of the *Power Adjustment Type* IE is *None* "None", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "None" and the Node B shall suspend on going power adjustments for all radio links for the UE-Node B Communication Context.

If the *Inner Loop DL PC Status* IE is present and set to "Active", the Node B shall activate inner loop DL power control for all radio links for the Node B eCommunication eContext. If the *Inner Loop DL PC Status* IE is present and set to "Inactive", the Node B shall deactivate inner loop DL power control for all radio links for the Node B eCommunication eContext according to ref. [10].

Power Adjustment

The power balancing adjustment shall be superimposed on the inner loop power control adjustment (see Ref. [10]) if activated. The power balancing adjustment shall be such that:

$$\sum P_{bal} = (1 - r)(P_{ref} + P_{P-CPICH} - P_{init}) \text{ with an accuracy of } \pm 0.5 \text{ dB}$$

where the sum is performed over an adjustment period corresponding to a number of frames equal to the value of the *Adjustment Period* IE, P_{ref} is the value of the *DL Reference Power* IE, $P_{P-CPICH}$ is the power used on the primary CPICH, P_{init} is the code power of the last slot of the previous adjustment period and r is given by the *Adjustment Ratio* IE. If the last slot of the previous adjustment period is within a transmission gap due to compressed mode, P_{init} shall be set to the same value as the code power of the slot just before the transmission gap.

The adjustment within one adjustment period shall in any case be performed with the constraints given by the *Max Adjustment Step* IE and the DL TX power range set by the CRNC.

The power adjustments shall be started at the first slot of a frame with CFN modulo the value of *Adjustment Period* IE equal to 0 and shall be repeated for every adjustment period and shall be restarted at the first slot of a frame with CFN=0, until a new DL POWER CONTROL REQUEST message is received or the RL is deleted.

8.3.7.3 Abnormal Conditions

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8.3.8 Dedicated Measurement Initiation

8.3.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on dedicated resources in a Node B.

The Dedicated Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.8.2 Successful Operation

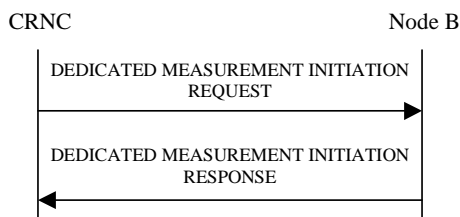


Figure 38: Dedicated Measurement Initiation procedure, Successful Operation

The procedure is initiated with a DEDICATED MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the eCCommunication eCControl pPort assigned to the Node B eCCommunication eContext.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below the meaning of the parameters are given in other specifications.

If the *Node B Communication Context ID IE* equals the reserved value "All NBCC", this measurement request shall apply for all current and future Node B Communication Contexts controlled via the Communication Control Port on which the DEDICATED MEASUREMENT INITIATION REQUEST message was received. Otherwise, this measurement request shall apply for the requested Node B Communication Context ID only.

If the *Node B Communication Context ID IE* equals the reserved value "All NBCC", the measurement request shall be treated as a single measurement, despite applying to multiple contexts. This means that it may only be terminated or failed on "All NBCC".

If the *Node B Communication Context ID IE* equals the reserved value "All NBCC", the measurement shall be initiated only for those Node B Communication Contexts handling a mode (FDD, 3.84Mcps TDD or 1.28Mcps TDD) for which the concerned measurement is specified in [4] and [5].

If the *Dedicated Measurement Object Type IE* is set to *Dedicated Measurement Object Type* is indicated as being "RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all indicated Radio Links.

[FDD – If the *Dedicated Measurement Object Type IE* is set to *Dedicated Measurement Object Type* is indicated as being "RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all indicated Radio Link Sets.]

[FDD - If the *Dedicated Measurement Object Type IE* is set to *Dedicated Measurement Object Type* is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all current and future Radio Links within the Node B Communication Context.]

[TDD - If the *Dedicated Measurement Object Type IE* is set to *Dedicated Measurement Object Type* is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for one existing DPCH per CCTrCH in each used time slot of current and future Radio Links within the Node B Communication Context, provided the measurement type is applicable to the respective DPCH.]

[FDD – If the *Dedicated Measurement Object Type IE* is set to *Dedicated Measurement Object Type* is indicated as being "ALL RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all existing and future Radio Link Sets within the Node B Communication Context.]

[TDD – If the *DPCH ID* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually. If no *DPCH ID* IE and no *PUSCH Information* IE is provided within the RL Information, the measurement request shall apply for one existing physical channel per CCTrCH in each used time slot of the Radio Link, provided the measurement type is applicable to this physical channel.]

[TDD – If the *PUSCH Information* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually.]

If the *CFN Reporting Indicator* IE is set to "FN Reporting Required", the *CFN* IE shall be included in the **DEDICATED MEASUREMENT REPORT message measurement report** or in the **DEDICATED MEASUREMENT RESPONSE message measurement response**, the latter only in the case the *Report Characteristics* IE is set to "'On-Demand'". The reported CFN shall be the CFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *CFN* IE is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

Report characteristics

The *Report Characteristics* IE is set to indicate how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to "'On-Demand'", the Node B shall return the result of the measurement immediately.

If the *Report Characteristics* IE is set to "'Periodic'", the Node B shall periodically initiate the Dedicated Measurement Report procedure for this measurement, with the requested report frequency.

If the *Report Characteristics* IE is set to "'Event A'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If **the Measurement Hysteresis Time IE is not included no hysteresis time is given**, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "'Event B'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If **the Measurement Hysteresis Time IE is not included no hysteresis time is given**, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "'Event C'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising/falling time **specified by the Measurement Change Time IE** has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to "'Event D'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the rising/falling time **specified by the Measurement Change Time IE** has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to "'Event E'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If **the Measurement Threshold 2 IE 'Measurement Threshold 2'** is not present, the Node B shall use **the value of the Measurement Threshold 1 IE 'Measurement Threshold 1'** instead. If **the Measurement Hysteresis Time IE is not included no 'Measurement Hysteresis Time' is provided**, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to "'Event F'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as

terminating any corresponding periodic reporting. If ~~the Measurement Threshold 2 IE 'Measurement Threshold 2'~~ is not present, the Node B shall use ~~the value of the Measurement Threshold 1 IE 'Measurement Threshold 1'~~ instead. If ~~the Measurement Hysteresis Time IE is not included no 'Measurement Hysteresis Time' is provided~~, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is not set to *"On-Demand"*, the Node B is required to perform reporting for a dedicated measurement object, in accordance with the conditions provided in the DEDICATED MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no dedicated measurement object(s) for which a measurement is defined exists any-more, the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Dedicated Measurement Reporting procedure immediately, and then continue with the measurements as specified in the DEDICATED MEASUREMENT INITIATION REQUEST message.

Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the DEDICATED MEASUREMENT INITIATION RESPONSE, DEDICATED MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n)

$a = 1/2^{(k/2)}$, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

Response message

If the Node B was able to initiate the measurement requested by the CRNC, it shall respond with the DEDICATED MEASUREMENT INITIATION RESPONSE message using the *eCommunication eControl pPort* assigned to the Node B *eCommunication eContext*. The message shall include the same Measurement ID that was used in the measurement request.

Only in the case where ~~the~~ *Report Characteristics* IE is set to *"On-Demand"*, the DEDICATED MEASUREMENT INITIATION RESPONSE message shall contain the measurement result. In this case, also the *Dedicated Measurement Object* IE shall be included if it was included in the request message.

In the case ~~that where~~ the *Node B Communication Context ID* IE is set to *"All NBCC"*, the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE shall be set to the value *"All CRNCCC"*, which is reserved for this purpose.

Interaction with Reset Procedure

If a measurement has been requested with the *Node B Communication Context ID* IE set to *"All NBCC"*, the Node B shall terminate the measurement locally if either the CRNC or the Node B initiates the Reset procedure for the relevant Communication Control Port or the entire Node B.

8.3.8.3 Unsuccessful Operation

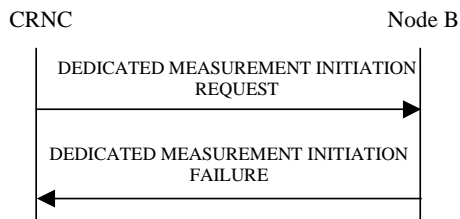


Figure 39: Dedicated Measurement Request-Initiation procedure: Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a DEDICATED MEASUREMENT INITIATION FAILURE message using the eCCommunication eCControl pPort assigned to the Node B eCCommunication eCContext. The message shall include the same Measurement ID that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message and the Cause IE set to an appropriate value.

In the case that where the Node B Communication Context ID IE is set to "All NBCC" the CRNC Communication Context ID IE in the DEDICATED MEASUREMENT INITIATION FAILURE shall be set to the value "All CRNCCC", which is reserved for this purpose.

Typical cause values are as follows:

Radio Network Layer cause

- Measurement not supported for the object
- Measurement Temporarily not Available

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.8.4 Abnormal Conditions

The allowed combinations of the Dedicated Measurement Type and Report Characteristics Type are shown in the table below marked with "X". For not allowed combinations, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

Table 4: Allowed Dedicated Measurement Type and Report Characteristics Type combinations

Dedicated Measurement Type	Report Characteristics Type								On Modification
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	
SIR	X	X	X	X	X	X	X	X	
SIR Error	X	X	X	X	X	X	X	X	
Transmitted Code Power	X	X	X	X	X	X	X	X	
RSCP	X	X	X	X	X	X	X	X	
Rx Timing Deviation	X	X	X	X	X	X	X	X	
Round Trip Time	X	X	X	X	X	X	X	X	

If the Dedicated Measurement Type received in the Dedicated Measurement Type IE is not defined in ref. [4] or [5] to be measured on the Dedicated Measurement Object Type received in the Dedicated Measurement Object Type IE in the

DEDICATED MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

8.3.9 Dedicated Measurement Reporting

8.3.9.1 General

This procedure is used by the Node B to report the result of measurements requested by the CRNC with the Dedicated Measurement Initiation procedure. The Node B may initiate the Dedicated Measurement Reporting procedure at any time after establishing a Radio Link, as long as the Node B eCommunication eContext exists.

8.3.9.2 Successful Operation

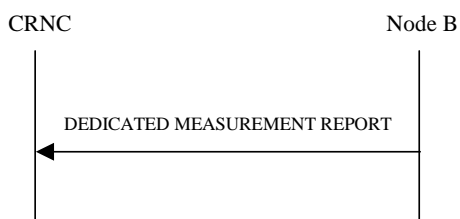


Figure 40: Dedicated Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the Node B shall initiate the Dedicated Measurement Reporting procedure. The DEDICATED MEASUREMENT REPORT message shall use the eCommunication eControl pPort assigned to the Node B eCommunication eContext. If the measurement was initiated (by the Dedicated Measurement Initiation procedure) for multiple dedicated measurement objects, the Node B may include measurement values for multiple objects in the DEDICATED MEASUREMENT REPORT message. Unless specified below, the meaning of the parameters are given in other specifications.

The **Dedicated Measurement ID** IE shall be set to the **Dedicated Measurement ID** provided by the CRNC when initiating the measurement with the Dedicated Measurement Initiation procedure.

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see ref.[22] and [23]), the Measurement not available shall be reported.

8.3.9.3 Abnormal Conditions

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8.3.10 Dedicated Measurement Termination

8.3.10.1 General

This procedure is used by the CRNC to terminate a measurement previously requested by the Dedicated Measurement Initiation procedure.

The Dedicated Measurement Termination procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.10.2 Successful Operation



Figure 41: Dedicated Measurement Termination procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT TERMINATION REQUEST message, sent from the CRNC to the Node B using the eCommunication eControl pPort assigned to the Node B eCommunication eContext.

Upon reception, the Node B shall terminate reporting of dedicated measurements corresponding to the received Measurement ID IE ~~Dedicated Measurement ID~~.

8.3.10.3 Abnormal Conditions

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8.3.11 Dedicated Measurement Failure

8.3.11.1 General

This procedure is used by the Node B to notify the CRNC that a measurement previously requested by the Dedicated Measurement Initiation procedure can no longer be reported. The Node B is allowed to initiate the DEDICATED MEASUREMENT FAILURE INDICATION message at any time after having sent the RADIO LINK SETUP RESPONSE message, as long as the Node B eCommunication eContext exists.

8.3.11.2 Successful Operation



Figure 42: Dedicated Measurement Failure procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT FAILURE INDICATION message, sent from the Node B to the CRNC using the eCommunication eControl pPort assigned to the Node B eCommunication eContext, to inform the CRNC that a previously requested measurement can no longer be reported. The Node B has locally terminated the indicated measurement.

If the failed measurement was initiated with the *Node B Communication Context ID* IE set to the reserved value "All NBCC" and the Node B has terminated the measurement reporting of the measurement corresponding to the Measurement ID indicated in the DEDICATED MEASUREMENT FAILURE INDICATION message, the *CRNC Communication Context ID* IE shall be set to the value "All CRNCCC".

8.3.11.3 Abnormal Conditions

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8.3.12 Radio Link Failure

8.3.12.1 General

This procedure is used by the Node B to indicate a failure in one or more Radio Links [FDD - or Radio Link Sets][TDD or CCTrCHs within a Radio Link].

The Node B may initiate the Radio Link Failure procedure at any time after establishing a Radio Link.

8.3.12.2 Successful Operation



Figure 43: Radio Link Failure procedure, Successful Operation

When the Node B detects that one or more Radio Link [FDD - or Radio Link Sets] [TDD – or CCTrCHs within a Radio Link] is-are no longer available, it sends the RADIO LINK FAILURE INDICATION message to the CRNC indicating the failed Radio Links or Radio Link Sets or CCTrCHs with the most appropriate cause values in the *Cause IE*. The message shall use the Communication Control Port assigned to the concerned Node B Communication Context.

If the failure concerns one or more individual Radio Links, the Node B shall indicate the affected Radio Link(s) using the *RL Information IE*. [FDD - The Node B shall indicate the affected Radio Link Set(s) using the *RL Set Information IE*.] [TDD – If the failure concerns only the failure of one or more CCTrCH's within in-a radio link, the Node B shall indicate the affected CCTrCH's using the *CCTrCH ID IE*.]

When the Radio Link Failure procedure is used to notify the loss of UL synchronisation of a [FDD – Radio Link Set] [TDD – Radio Link or CCTrCHs within a Radio Link] on the Uu interface, the RADIO LINK FAILURE INDICATION message shall be sent, with the Cause IE set to cause value "Synchronisation Failure", when indicated by the UL out-of-sync algorithm defined in [10] and [21]. [FDD – The algorithm_s in [10] shall use the maximum value of the parameters N_OUTSYNC_IND and T_RLFAILURE, and the minimum value of the parameters N_INSYNC_IND, that are configured in the cells supporting the radio links of the RL Set.]

[FDD – When the Radio Link Failure procedure is used to indicate permanent failure in one or more Radio Links/Radio Link Sets due to the occurrence of an UL or DL frame with more than one transmission gap caused by one or more compressed mode pattern sequences, the DL transmission shall be stopped and the RADIO LINK FAILURE INDICATION message shall be sent with the cause value "Invalid CM Settings". After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the Node B shall not remove the Radio Link(s)/Radio Link Set(s) from the Node B Communication UE-Context, or the Node B Communication UE-Context itself.]

In the other cases, the Radio Link Failure procedure is used to indicate that one or more Radio Links/Radio Link Sets are permanently unavailable and cannot be restored. After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the Node B shall not remove the Radio Link/Radio Link Set from the Node B Communication UE-Context, or the Node B Communication UE-Context itself. When applicable, the retention priorities associated with the transport channels shall be used by the Node B to prioritise which Radio Links/Radio Link Sets to indicate as unavailable to the CRNC.

Typical cause values are:

Radio Network Layer Causes:

- Synchronisation Failure
- Invalid CM settings

Transport Layer Causes:

- Transport Resources Unavailable

Miscellaneous Causes:

- Control Processing Overload
- HW Failure
- O&M Intervention

8.3.12.3 Abnormal Conditions

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8.3.13 Radio Link Restoration**8.3.13.1 General**

This procedure is used by the Node B to notify the achievement and re-achievement of uplink synchronisation of one or more [FDD - Radio Link Sets][TDD – Radio Links or CCTrCHs within a Radio Link] on the Uu [interface](#).

The Node B may initiate the Radio Link Restoration procedure at any time after establishing a Radio Link.

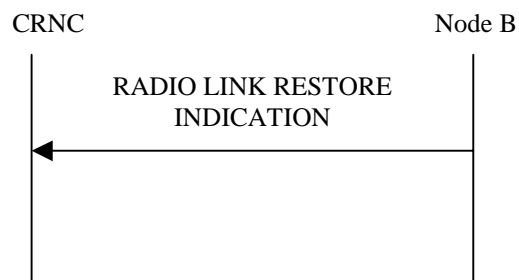
8.3.13.2 Successful Operation

Figure 44: Radio Link Restoration procedure, Successful Operation

The Node B shall send the RADIO LINK RESTORE INDICATION message to the CRNC when indicated by the UL [synchronisation](#) detection algorithm defined in ref. [10] and [21]. [FDD – The algorithm in ref. [10] shall use the minimum value of the parameters N_INSYNC_IND that are configured in the cells supporting the radio links of the RL Set.] **The message shall use the Communication Control Port assigned to the concerned Node B Communication Context.**

[TDD – If the re-established Uu synchronisation concerns one or more individual Radio Links, the Node B shall indicate the affected Radio Link(s) using the *RL Information IE*.] [TDD – If the re-established Uu synchronisation concerns one or more individual CCTrCHs within a radio link, the Node B shall indicate the affected CCTrCHs using the *CCTrCH ID IE*.] [FDD – If the re-established Uu synchronisation concerns one or more Radio Link Sets, the Node B shall indicate the affected Radio Link Set(s) using the *RL Set Information IE*.]

8.3.13.3 Abnormal Condition

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8.3.14 Compressed Mode Command [FDD]

8.3.14.1 General

The Compressed Mode Command procedure is used to activate or deactivate the compressed mode in the Node B for one Node B Communication Context~~UE-UTRAN connection~~.

The Compressed Mode Command procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.14.2 Successful Operation



Figure 47: Compressed Mode Command procedure, Successful Operation

The procedure is initiated by the CRNC sending a COMPRESSED MODE COMMAND message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

The Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the *CM Configuration Change CFN* IE requested by the CRNC when receiving the COMPRESSED MODE COMMAND message from the CRNC. From that moment on, all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions (if present) shall be started when the indicated *TGCFN* IE elapses. The *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value.

If the values of the *CM Configuration Change CFN* IE and the *TGCFN* IE are equal, the concerned inged Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CM Configuration Change CFN* IE.

8.3.14.3 Abnormal Conditions

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8.3.15 Downlink Power Timeslot Control [TDD]

8.3.15.1 General

The purpose of this procedure is to enable the Node B to use the indicated DL Timeslot ISCP values when deciding the DL TX Power for each timeslot.

The Downlink Power Timeslot Control procedure can be initiated by the CRNC at any time when the Node B eCommunication eContext exists, irrespective of other ongoing CRNC initiated dedicated NBAP procedures towards this Node B eCommunication eContext. The only exception occurs when the CRNC has requested the deletion of the last RL via this Node B, in which case the Downlink Power Timeslot Control procedure shall no longer be initiated.

8.3.15.2 Successful Operation



Figure 47A: Downlink Power Timeslot Control procedure, Successful Operation

The procedure is initiated by the CRNC sending a DL POWER TIMESLOT CONTROL REQUEST message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon reception, the Node B shall use the indicated DL Timeslot ISCP value when deciding the DL TX Power for each timeslot as specified in ref. [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged.

8.3.15.3 Abnormal Conditions

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8.3.16 Radio Link Pre-emption

8.3.16.1 General

This procedure is started by the Node B when resources need to be freed.

The Node B may initiate the Radio Link Pre-emption procedure at any time after establishing a Radio Link.

8.3.16.2 Successful Operation

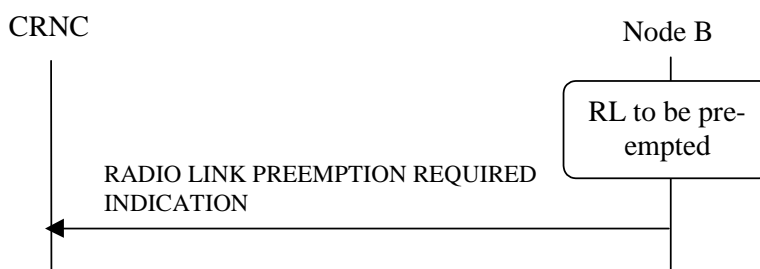


Figure 47B: Radio Link Pre-emption procedure, Successful Operation

When the Node B detects that a one or more Radio Links should be pre-empted, (see Annex A), it shall send the RADIO LINK PREEMPTION REQUIRED INDICATION message to the CRNC using the Communication Control Port assigned to the concerned Node B Communication Context.

If all Radio Links for a CRNC Communication Context ID should be pre-empted, the *RL Information IE* shall be omitted. If one or several but not all Radio Links should be pre-empted for a CRNC Communication Context, the Radio Links that should be pre-empted shall be indicated in the *RL Information IE*. The Radio Link(s) that should be pre-empted should be deleted by the CRNC.

8.3.16.3 Abnormal Conditions

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8.4 Error Handling Procedures

8.4.1 Error Indication

8.4.1.1 General

The Error Indication procedure is initiated by a node in order to report detected errors in one incoming message, provided they cannot be reported by an appropriate response message.

8.4.1.2 Successful Operation

When the conditions defined in subclause 10 are fulfilled, the Error Indication procedure is initiated by an ERROR INDICATION message sent from the receiving node.

When the ERROR INDICATION message is sent from a Node B to its CRNC, the *CRNC Communication Context ID* IE shall be included in the message if available. When the ERROR INDICATION message is sent from a CRNC to a Node B, the *Node B Communication Context ID* IE shall be included in the message if available.

When a message for a dedicated procedure is received in the Node B with an invalid *Node B Communication Context ID* IE, the Node B shall include the unknown *Node B Communication Context ID* IE from the received message in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

When a message for a dedicated procedure is received in the CRNC with an invalid *CRNC Communication Context ID* IE, the CRNC shall include the unknown *CRNC Communication Context ID* IE from the received message in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

The ERROR INDICATION message shall include either the *Cause* IE, or the *Criticality Diagnostics* IE, or both the *Cause* IE and the *Criticality Diagnostics* IE.

Typical cause values for the ERROR INDICATION message are:

Protocol Causes:

- Transfer Syntax Error
- Abstract Syntax Error (Reject)
- Abstract Syntax Error (Ignore and Notify)
- Message not Compatible with Receiver State
- Unspecified

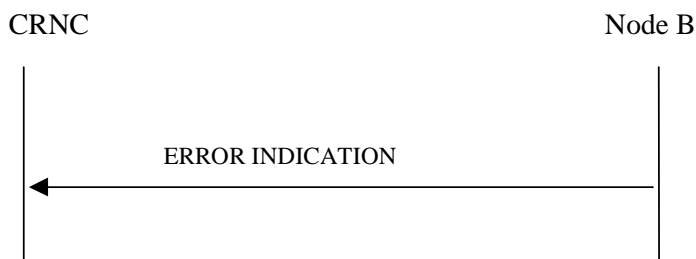


Figure 49: Error Indication procedure (Node B to CRNC): Successful Operation

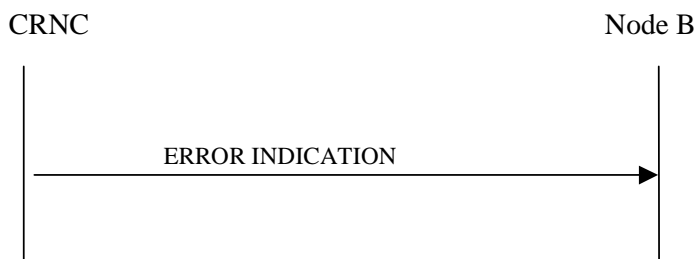


Figure 50: Error Indication procedure (CRNC to Node B), Successful Operation

8.4.1.3 Abnormal Conditions

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9 Elements for NBAP communication

9.1 Message Functional Definition and Contents

9.1.1 General

Subclause 9.1 presents the contents of NBAP messages in tabular format. The corresponding ASN.1 definition is presented in subclause 9.3. In case there is contradiction between the tabular format in subclause 9.1 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional IEs, where the tabular format shall take precedence.

NOTE: The messages have been defined in accordance to the guidelines specified in ref. [26].

9.1.2 Message Contents

9.1.2.1 Presence

An information element can be of the following types:

M	IEs marked as Mandatory (M) shall always be included in the message.
O	IEs marked as Optional (O) may or may not be included in the message.
C	IEs marked as Conditional (C) shall be included in a message only if the condition is satisfied. Otherwise the IE shall not be included.

In case of an **i**nformation **e**lement group, the group is preceded by a name for the info group (in bold). It is also indicated how many times a group may be repeated in the message and whether the group is conditional. The presence field of the **i**nformation **e**lements inside one group defines if the **i**nformation **e**lement is mandatory, optional or conditional if the group is present. if the group is present.

9.1.2.2 Criticality

Each **i**nformation **e**lement or Group of **i**nformation **e**lements may have a criticality information applied to it. Following cases are possible:

-	No criticality information is applied explicitly.
YES	Criticality information is applied. 'YES' is usable only for non-repeatable information elements.
GLOBAL	The information element and all its repetitions together have one common criticality information. 'GLOBAL' is usable only for repeatable information elements.
EACH	Each repetition of the information element has its own criticality information. It is not allowed to assign different criticality values to the repetitions. 'EACH' is usable only for repeatable information elements.

9.1.2.3 Range

The Range column indicates the allowed number of copies of repetitive IEs/AEs.

9.1.2.4 Assigned Criticality

This column provides the actual criticality information as defined in subclause 10.3.2, if applicable.

9.1.3 —COMMON TRANSPORT CHANNEL SETUP REQUEST

9.1.3.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
CHOICE <i>Common Physical Channel To Be Configured</i>	M				YES	ignore
>Secondary CCPCH					–	
>>Secondary CCPCH		1				
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>FDD SCCPCH Offset	M		9.2.2.15	Corresponds to [7]: S-CCPCH,k	–	
>>>DL Scrambling Code	C-PCH		9.2.2.13		–	
>>>FDD DL Channelisation Code Number	M		9.2.2.14		–	
>>>TFCS	M		9.2.1.58	For the DL.	–	
>>>Secondary CCPCH Slot Format	M		9.2.2.43		–	
>>>TFCI Presence	C ₁ SlotFormat		9.2.1.57	Refer to TS [7]	–	
>>>Multiplexing Position	M		9.2.2.23		–	
>>>Power Offset Information		14			–	
>>>>PO1	M		Power Offset 9.2.2.29	Power offset for the TFCI bits	–	
>>>>PO3	M		Power Offset 9.2.2.29	Power offset for the pilot bits	–	
>>>STTD Indicator	M		9.2.2.48		–	
>>>FACH Parameters		0..<maxno ofFACHs>			GLOBAL	reject
>>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>>Transport Format Set	M		9.2.1.59	For the DL.	–	
>>>>ToAWS	M		9.2.1.61		–	
>>>>ToAWE	M		9.2.1.60		–	
>>>>Max FACH Power	M		DL Power 9.2.1.21	Maximum allowed power on the FACH.	–	
>>>PCH Parameters		0..1			YES	reject
>>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>>Transport Format Set	M		9.2.1.59	For the DL.	–	
>>>>ToAWS	M		9.2.1.61		–	
>>>>ToAWE	M		9.2.1.60		–	

>>>>PCH Power	M		DL Power 9.2.1.21		-	
>>>>PICH Parameters		1			-	
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>FDD DL Channelisation Code Number	M		9.2.2.14		-	
>>>>PICH Power	M		9.2.1.49A		-	
>>>>PICH Mode	M		9.2.2.26	Number of PI per frame	-	
>>>>STTD Indicator	M		9.2.2.48		-	
>PRACH					-	
>>PRACH		1				
>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>Scrambling Code Number	M		9.2.2.42		-	
>>>TFCS	M		9.2.1.58	For the UL.	-	
>>>Preamble Signatures	M		9.2.2.31		-	
>>>Allowed Slot Format Information		1..<Mmax noofSlotFormatsPRA CH>			-	
>>>>RACH Slot Format	M		9.2.2.37		-	
>>>RACH Sub Channel Numbers	M		9.2.2.38		-	
>>>Puncture Limit	M		9.2.1.50	For the UL	-	
>>>Preamble Threshold	M		9.2.2.32		-	
>>>RACH Parameters		1			YES	Rreject
>>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>>Transport Format Set	M		9.2.1.59	For the UL.	-	
>>>AICH Parameters		1			-	
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>AICH Transmission Timing	M		9.2.2.1		-	
>>>>FDD DL Channelisation Code Number	M		9.2.2.14		-	
>>>>AICH Power	M		9.2.2.D		-	
>>>>STTD Indicator	M		9.2.2.48		-	
>PCPCHes					-	
>>CPCH Parameters		1			-	
>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>Transport Format Set	M		9.2.1.59	For the UL.	-	
>>>AP Preamble Scrambling Code	M		CPCH Scrambling Code Number		-	

			9.2.2.4B			
>>>CD Preamble Scrambling Code	M		CPCH Scrambling Code Number 9.2.2.4B		–	
>>>TFCS	M		9.2.1.58	For the UL	–	
>>>CD Signatures	O		Preamble Signatures 9.2.2.31	Note: When not present, all CD signatures are to be used.	–	
>>>CD Sub Channel Numbers			9.2.2.1C		–	
>>>Puncture Limit	M		9.2.1.50	For the UL	–	
>>>CPCH UL DPCCH Slot Format	M		9.2.2.4C	For UL CPCH message control part	–	
>>>UL SIR	M		UL SIR 9.2.1.67A		–	
>>>Initial DL Transmission Power	M		DL Power 9.2.1.21		–	
>>>Maximum DL Power	M		DL Power 9.2.1.21		–	
>>>Minimum DL Power	M		DL Power 9.2.1.21		–	
>>>PO2	M		Power Offset 9.2.2.29	Power offset for the TPC bits relative to the pilot bits.	–	
>>>FDD TPC DL Step Size	M		9.2.2.16		–	
>>>N_Start_Message	M		9.2.2.23C		–	
>>>N_EOT	M		9.2.2.23A		–	
>>>Channel Assignment Indication	M		9.2.2.1D		–	
>>>CPCH Allowed Total Rate	M		9.2.2.4A		–	
>>>PCPCH Channel Information		1..<maxno ofPCPCHs >			–	
>>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>>CPCH Scrambling Code Number	M		9.2.2.4B	For UL PCPCH	–	
>>>>DL Scrambling Code	M		9.2.2.13	For DL CPCH message part	–	
>>>>FDD DL Channelisation Code Number	M		9.2.2.14	For DL CPCH message part	–	
>>>>PCP Length	M		9.2.2.24A		–	
>>>>UCSM Information	C-NCA	1			–	
>>>>>Min UL Channelisation Code Length	M		9.2.2.22		–	
>>>>>NF_max	M		9.2.2.23B		–	
>>>>>Channel		0..<maxA			–	

Request Parameters		<i>PSigNum</i> >				
>>>>>AP Preamble Signature	M		9.2.2.1A		–	
>>>>>AP Sub Channel Number	O		9.2.2.1B		–	
>>>VCAM Mapping Information	C-CA	<i>1..<maxno ofLen></i>		Refer to TS [18]	–	
>>>>Min UL Channelisation Code Length	M		9.2.2.22		–	
>>>>NF_max	M		9.2.2.23B		–	
>>>>Max Number of PCPCHes	M		9.2.2.20A		–	
>>>>SF Request Parameters		<i>1..<maxA PSigNum></i>			–	
>>>>>AP Preamble Signature	M		9.2.2.1A		–	
>>>>>AP Sub Channel Number	O		9.2.2.1B		–	
>>>>AP-AICH Parameters		<i>1</i>			–	
>>>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>>>FDD DL Channelisation Code Number	M		9.2.2.14		–	
>>>>>AP-AICH Power	M		AICH Power 9.2.2.D		–	
>>>>>CSICH Power	M		AICH Power 9.2.2.D	For CSICH bits at end of AP-AICH slot	–	
>>>>>STTD Indicator	M		9.2.2.48		–	
>>>>CD/CA-ICH Parameters		<i>1</i>			–	
>>>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>>>FDD DL Channelisation Code Number	M		9.2.2.14		–	
>>>>>CD/CA-ICH Power	M		AICH Power 9.2.2.D		–	
>>>>>STTD Indicator	M		9.2.2.48		–	

Condition	Explanation
SlotFormat	The IE shall be present if the <i>Secondary CCPCH Slot Format</i> IE is set to any of the values from 8 to 17.
CA	The IE shall be present if the <i>Channel Assignment Indication</i> IE is set to "CA Active".
NCA	The IE shall be present if the <i>Channel Assignment Indication</i> IE is set to "CA Inactive".
PCH	The IE shall be present if the <i>PCH pParameters</i> IE is not present.

Range bBound	Explanation
<i>MmaxnoofFACHs</i>	Maximum number of FACHs that can be defined on a Secondary CCPCH.
<i>MmaxnoofPCCHs</i>	Maximum number of PCCHs for a CPCH
<i>MmaxnoofLen</i>	Maximum number of Min UL Channelisation Code Length
<i>MmaxnoofSlotFormatsPRACH</i>	Maximum number of SF for a PRACH
<i>MmaxAPSigNum</i>	Maximum number of AP Signatures.

9.1.3.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
CHOICE <i>Common Physical Channel To Be Configured</i>	M				YES	ignore
>>>Secondary CCPCHs					–	
>>>>SCCPCH CcTrCH ID	M		CcTrCH ID 9.2.3.3	For DL CcTrCH supporting one or several Secondary CCPCHs	–	
>>>>TFCS	M		9.2.1.58	For DL CcTrCH supporting one or several Secondary CCPCHs	–	
>>>>TFCI Coding	M		9.2.3.22		–	
>>>>Puncture Limit	M		9.2.1.50		–	
>>>>Secondary CCPCH		0..<maxno ofSCCPCHs>		Mandatory For 3.84Mcps TDD. <u>Not Applicable to 1.28Mcps TDD-only</u>	GLOBAL	reject
>>>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>>>TDD Channelisation Code	M		9.2.3.19		–	
>>>>>Time Slot	M		9.2.3.23		–	
>>>>>Midamble Shift and Burst Type	M		9.2.3.7		–	
>>>>>TDD Physical Channel Offset	M		9.2.3.20		–	
>>>>>Repetition Period	M		9.2.3.16		–	
>>>>>Repetition Length	M		9.2.3.15		–	
>>>>>SCCPCH Power	M		DL Power 9.2.1.21		–	
>>>>>FACH		0..<maxno ofFACHs>			GLOBAL	reject
>>>>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>>>>FACH CcTrCH ID	M		CcTrCH ID 9.2.3.3		–	
>>>>>>Transport Format Set	M		9.2.1.59	For the DL.	–	
>>>>>>ToAWS	M		9.2.1.61		–	
>>>>>>ToAWE	M		9.2.1.60		–	
>>>>>>Max FACH Power	O		DL Power 9.2.1.21	<u>Applicable to For 1.28Mcps TDD only</u>	YES	reject

>>>PCH		0..1			YES	reject
>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>PCH CCTrCH ID	M		CCTrCH ID 9.2.3.3		-	
>>>Transport Format Set	M		9.2.1.59	For the DL.	-	
>>>ToAWS	M		9.2.1.61		-	
>>>ToAWE	M		9.2.1.60		-	
>>>>PICH Parameters		0..1		Mandatory Ffor 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD-only	YES	reject
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>>>>Time Slot	M		9.2.3.23		-	
>>>>Midamble sShift and Burst Type	M		9.2.3.7		-	
>>>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>>>Repetition pPeriod	M		9.2.3.16		-	
>>>>Repetition lLength	M		9.2.3.15		-	
>>>>Paging Indicator Length	M		9.2.3.8		-	
>>>>PICH Power	M		9.2.1.49A		-	
>>>PCH Power	O		DL Power 9.2.1.21	Applicable to Fer 1.28Mcps TDD only	-YES	reject
>>>>PICH Parameters LCR		0..1		Mandatory Ffor 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD-only	YES	reject
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
>>>>Time Slot LCR	M		9.2.3.24A		-	
>>>>Midamble sShift LCR	M		9.2.3.7A		-	
>>>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>>>Repetition pPeriod	M		9.2.3.16		-	
>>>>Repetition lLength	M		9.2.3.15		-	
>>>>Paging Indicator Length	M		9.2.3.8		-	
>>>>PICH Power	M		9.2.1.49A		-	
>>Secondary CCPCH LCR		0..<maxno ofS-CCPCHsL		Mandatory Ffor 1.28Mcps TDD. Not Applicable	GLOBAL	reject

		CRs>		to 3.84Mcps TDD-only		
>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble sShift LCR	M		9.2.3.7A		-	
>>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>>Repetition Period	M		9.2.3.16		-	
>>>Repetition Length	M		9.2.3.15		-	
>>>SCCPCH Power	M		DL Power 9.2.1.21		-	
>PRACH					-	
>>>PRACH	M	0..1		Mandatory for 3.84Mcps TDD Not Applicable to 1.28Mcps TDD-only	YES	reject
>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>TFCS	M		9.2.1.58		-	
>>>Time Slot	M		9.2.3.23		-	
>>>TDD Channelisation Code	M		9.2.3.19		-	
>>>Max PRACH Midamble Shifts	M		9.2.3.6		-	
>>>PRACH Midamble	M		9.2.3.14		-	
>>>>RACH		1			YES	reject
>>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>>Transport Format Set	M		9.2.1.59	For the UL	-	
>>>>PRACH LCR		0.. <maxnoof PRACHLCRs>		Mandatory Ffor 1.28Mcps TDD Not Applicable to 3.84Mcps TDD-only	YESGLOBAL AL	reject
>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>TFCS	M		9.2.1.58		-	
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
>>>Max PRACH Midamble Shifts	M		9.2.3.6		-	
>>>PRACH Midamble	M		9.2.3.14		-	
>>>>RACH		1			YES	reject
>>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>>Transport Format Set	M		9.2.1.59	For the UL	-	
>>FPACH		0..1		Mandatory for 1.28Mcps TDD Not Applicable to 3.84Mcps	GLOBALY ES	reject

				TDD-only		
>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble sShift LCR	M		9.2.3.7A		-	
>>>Max FPACH Power	M		9.2.3.5E ^E		-	

Range bBound	Explanation
<i>M</i> maxnoofSCCPCHs	Maximum number of Secondary CCPCHs per CCTrCH for 3.84Mcps TDD.
<i>M</i> maxnoofS-CCPCHsLCRs	Maximum number of Secondary CCPCHs per CCTrCH for 1.28Mcps TDD.
<i>M</i> maxnoofCCTrCHs	Maximum number of CCTrCHs that can be defined in a cell.
<i>M</i> maxnoofFACHs	Maximum number of FACHs that can be defined on a Secondary CCPCH.
<i>M</i> maxnoofPRACHLCRs	Maximum number of PRACHs LCR that can be defined on a RACH for 1.28Mcps TDD.

9.1.4 COMMON TRANSPORT CHANNEL SETUP RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
FACH Parameters Info		<i>0..<maxno ofFACHs></i>		The FACH Parameters may be combined with PCH Parameters	GLOBAL	ignore
>FACH Parameters	M		Common Transport Channel Information Response 9.2.1.14A		–	
PCH Parameters	O		Common Transport Channel Information Response 9.2.1.14A	The PCH Parameters may be combined with FACH Parameters	YES	ignore
RACH Parameters	O		Common Transport Channel Information Response 9.2.1.14A	The RACH Parameters shall not be combined with FACH Parameters or PCH Parameters	YES	ignore
CPCH Parameters	O		Common Transport Channel Information Response 9.2.1.14A	The CPCH Parameters shall not be combined with FACH Parameters or PCH Parameters or RACH Parameters	YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
<i>MmaxnoofFACHs</i>	Maximum number of FACHs that can be defined on a Secondary CCPCH[FDD] / a group of Secondary CCPCHs [TDD].

9.1.5 COMMON TRANSPORT CHANNEL SETUP FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	–
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	–
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.6 COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST

9.1.6.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
CHOICE <i>Common Physical Channel To Be Configured</i>	M				YES	reject
>>Secondary CCPCH					–	
>>FACH Parameters		0..<maxFACHCell>			GLOBAL	reject
>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>Max FACH Power	O		DL Power 9.2.1.21	Maximum allowed power on the FACH.	–	
>>>ToAWS	O		9.2.1.61		–	
>>>ToAWE	O		9.2.1.60		–	
>>PCH Parameters		0..1			YES	reject
>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>PCH Power	O		DL Power 9.2.1.21	Power to be used on the PCH.	–	
>>>ToAWS	O		9.2.1.61		–	
>>>ToAWE	O		9.2.1.60		–	
>>PICH Parameters		0..1			YES	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>PICH Power	O		9.2.1.49A		–	
>PRACH					–	
>>PRACH Parameters		0..<MaxPRACHCell>			GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>Preamble Signatures	O		9.2.2.31		–	
>>>Allowed Slot Format Information		0..<MaxPRACHCell>			–	
>>>>RACH Slot Format	M		9.2.2.37		–	
>>>>RACH Sub Channel Numbers	O		9.2.2.38		–	
>>AICH Parameters		0..<MaxPRACHCell>			GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	

>>>AICH Power	O		9.2.2.D		–	
>CPCH					–	
>>CPCH Parameters		0..<maxno ofCPCHs>			GLOBAL	reject
>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>UL SIR	O		9.2.1.67A		–	
>>>Initial DL Transmission Power	O		DL Power 9.2.1.21		–	
>>>Maximum DL Power	O		DL Power 9.2.1.21		–	
>>>Minimum DL Power	O		DL Power 9.2.1.21		–	
>>AP-AICH Parameters		0..<maxno ofCPCHs>			GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>AP-AICH Power	O		AICH Power 9.2.2.D		–	
>>>CSICH Power	O		AICH Power 9.2.2.D	For CSICH bits at end of AP-AICH slot	–	
>>CD/CA-ICH Parameters		0..<maxno ofCPCHs>			GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>CD/CA-ICH Power	O		AICH Power 9.2.2.D		–	

Range bBound	Explanation
maxFACHCell/MaxFACHCell	Maximum number of FACHs that can be defined in a Cell
maxnoofCPCHsMaxnoofCPCHs	Maximum number of CPCHs that can be defined in a Cell
maxPRACHCell/MaxPRACHCell	Maximum number of PRACHs and AICHes that can be defined in a Cell
maxnoofSlotFormatsPRACH/MaxnoofSlotFormatsPRACH	Maximum number of SF for a PRACH

9.1.6.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Secondary CCPCH Parameters		0..10..4			YES	reject

>CCTrCH ID	M		9.2.3.3	For DL CCTrCH supporting one or several Secondary CCPCHs	–	
>Secondary CCPCHs to be configured		<i>0..<maxno ofSCCPCHs>0..<MaxnoofSCCPCHs></i>			GLOBAL	reject
>>Common Physical Channel ID	M		9.2.1.13		–	
>>SCCPCH Power	O		DL power 9.2.1.21		–	
PICH Parameters		<i>0..10..4</i>			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>PICH Power	O		9.2.1.49A		–	
FACH pParameters		<i>0..<Mmax noofFACHs></i>			GLOBAL	reject
>Common Transport Channel ID	M		9.2.1.14		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	
>Max FACH Power	O		DL Power 9.2.1.21	Applicable to Fof 1.28Mcps TDD only	YES	reject
PCH pParameters		<i>0..10..4</i>			YES	reject
>Common Transport Channel ID	M		9.2.1.14		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	
>PCH Power	O		DL Power 9.2.1.21	Applicable to Fof 1.28Mcps TDD only	YES	reject
FPACH pParameters		<i>0..10..4</i>		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD. only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Max FPACH Power	O		9.2.3.5E		–	

Range b Bound	Explanation
<i>maxnoofSCCPCHsMaxnoofSCCPCHs</i>	Maximum number of SCCPCHs that can be repeated in a Cell
<i>maxnoofFACHsMaxnoofFACHs</i>	Maximum number of FACHs that can be repeated in a Cell

9.1.7 COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.8 COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.9 COMMON TRANSPORT CHANNEL DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Common Physical Channel ID	M		9.2.1.13	Indicates the Common Physical Channel for which the Common Transport Channels (together with the Common Physical Channel) shall be deleted.	YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject

9.1.10 COMMON TRANSPORT CHANNEL DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.11 BLOCK RESOURCE REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Blocking Priority Indicator	M		9.2.1.5		YES	reject
-Shutdown Timer	C-BlockNormal		9.2.1.56		YES	reject

Condition	Explanation
BlockNormal	The IE shall be present if the <i>Blocking Priority Indicator</i> IE indicates "Normal Priority".

9.1.12 BLOCK RESOURCE RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.13 BLOCK RESOURCE FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.14 UNBLOCK RESOURCE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	ignore

9.1.15 AUDIT REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	

9.1.16 AUDIT REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Start Of Audit Sequence Indicator	M		9.2.1.56B		YES	reject

9.1.17 AUDIT RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
End Of Audit Sequence Indicator	M		9.2.1.29A		YES	ignore
Cell Information		<i>0..<maxCellsInNodeB> 0..<maxCellsInNodeB></i>			EACH	ignore
>C-ID	M		9.2.1.9		–	
>Configuration Generation ID	M		9.2.1.16		–	
>Resource Operational State	M		9.2.1.52		–	
>Availability Status	M		9.2.1.2		–	
>Local Cell ID	M		9.2.1.38	The local cell that the cell is configured on	–	
>Primary SCH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>Secondary SCH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>Primary CPICH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>Secondary CPICH Information		<i>0..<maxSecondaryCPICHCells></i>			EACH	ignore
>>Secondary CPICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>Primary CCPCH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>BCH Information	O		Common Transport Channel Status		YES	ignore

			Information 9.2.1.13A4 B			
>Secondary CCPCH Information		$0..<maxS$ $CCPCHCell$ $>$			EACH	ignore
>>Secondary CCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>PCH Information	O		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>PICH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>FACH Information		$0..<maxFA$ $CHCell$ $>$			EACH	ignore
>>FACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>PRACH Information		$0..<maxP$ $RACHCell$ $>$			EACH	ignore
>>PRACH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>RACH Information		$0..<maxR$ $ACHCell$ $>$			EACH	ignore
>>RACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>AICH Information		$0..<maxP$ $RACHCell$ $>$			EACH	ignore
>>AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>PCPCH Information		$0..<maxP$ $CPCHCell$ $>$			EACH	ignore

		>				
>>PCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>CPCH Information		0..<maxCPCHCell>			EACH	ignore
>>CPCH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>AP-AICH Information		0..<maxCPCHCell>			EACH	ignore
>>AP-AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>CD/CA-ICH Information		0..<maxCPCHCell>			EACH	ignore
>>CD/CA-ICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>SCH Information	O		Common Physical Channel Status Information 9.2.1.13A	TDD Sync Channel	YES	ignore
>FPACH Information		0..<maxFPACHCell>		Applicable to Fdd-1.28Mcps TDD only	EACH	ignore
–>>FPACH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>DwPCH Information>DwPCH Information	O		Common Physical Channel Status Information 9.2.1.13A	Applicable to Fdd-1.28Mcps TDD only	YES	ignore
Communication Control Port Information		0..<maxCCPINNodeB>			EACH	ignore
>Communication Control Port ID	M		9.2.1.15		–	
>Resource Operational State	M		9.2.1.52		–	

>Availability Status	M		9.2.1.2		–	
Local Cell Information		0.. <maxLocal CellinNode B>			EACH	ignore
>Local Cell ID	M		9.2.1.38		–	
>DL or Global Capacity Credit	M		9.2.1.20B		–	
>UL Capacity Credit	O		9.2.1.65A		–	
>Common Channels Capacity Consumption Law	M		9.2.1.9A		–	
>Dedicated Channels Capacity Consumption Law	M		9.2.1.20A		–	
>Maximum DL Power Capability	O		9.2.1.39		–	
>Minimum Spreading Factor	O		9.2.1.47		–	
>Minimum DL Power Capability	O		9.2.1.46A		–	
>Local Cell Group ID	O		9.2.1.37A		–	
>Reference Clock aAvailability	O		9.2.3.14A	TDD only	YES	ignore
Local Cell Group Information		0.. <maxLocal CellinNode B>			EACH	ignore
>Local Cell Group ID	M		9.2.1.37A		–	
>DL or Global Capacity Credit	M		9.2.1.20B		–	
>UL Capacity Credit	O		9.2.1.65A		–	
>Common Channels Capacity Consumption Law	M		9.2.1.9A		–	
>Dedicated Channels Capacity Consumption Law	M		9.2.1.20A		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range bBound	Explanation
<u>maxCellinNodeB</u> MaxCellinNodeB	Maximum number of Cells that can be configured in Node B
<u>maxCCPinNodeB</u> MaxCCPinNodeB	Maximum number of eCommunication eControl pPorts that can exist in the Node B
<u>maxCPCHCell</u> MaxCPCHCell	Maximum number of CPCHes that can be defined in a Cell
<u>maxLocalCellinNodeB</u> MaxLocalCellinNodeB	Maximum number of Local Cells that can exist in the Node B
<u>maxPCPCHCell</u> MaxPCPCHCell	Maximum number of PCPCHes that can be defined in a Cell
<u>maxSCPICHCell</u> MaxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.
<u>maxSCCPCHCell</u> MaxSCCPCHCell	Maximum number of Secondary CCPCHs that can be defined in a Cell.
<u>maxFACHCell</u> MaxFACHCell	Maximum number of FACHes that can be defined in a Cell
<u>maxPRACHCell</u> MaxPRACHCell	Maximum number of PRACHes that can be defined in a Cell
<u>maxRACHCell</u> MaxRACHCell	Maximum number of RACHes that can be defined in a Cell
<u>maxFPACHCell</u> MaxFPACHCell	Maximum number of FPACHes that can be defined in a Cell

9.1.17A AUDIT FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality diagnostics	O		9.2.1.17		YES	ignore

9.1.18 COMMON MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
Measurement ID	M		9.2.1.42		YES	reject
Common Measurement Object Type	M		9.2.1.10		YES	reject
CHOICE Common-Common Measurement Object Type	M				YES	reject
>>Cell					-	
>>C-ID	M		9.2.1.9		-	
>>Time Slot	O		9.2.3.23	Applicable to FDD only	-	
>>Time Slot LCR	O		9.2.3.24A	Applicable to FDD only	YES	reject
>>Neighbouring Cell Measurement Information		0..<maxNoMeasNCells>			GLOBAL	ignore
>>>CHOICE Neighbouring Cell Measurement Information					-	-
>>>> Neighbouring FDD Cell Measurement Information				FDD only	-	-
>>>> Neighbouring FDD Cell Measurement Information	M		9.2.1.47C		-	-
>>>> Neighbouring TDD Cell Measurement Information				Applicable to 3.84Mcps TDD only	-	-
>>>> Neighbouring TDD Cell Measurement Information	M		9.2.1.47D		-	-
>>RACH				FDD only	-	
>>C-ID	M		9.2.1.9		-	
>>Common Transport Channel ID	M		9.2.1.14		-	
>>CPCH				FDD only	-	
>>C-ID	M		9.2.1.9		-	
>>Common Transport Channel ID	M		9.2.1.14		-	
>>Spreading Factor	O		Minimum UL Channelisation Code Length 9.2.2.22		-	
Common Measurement Type	M		9.2.1.11		YES	reject
Measurement Filter Coefficient	O		9.2.1.41		YES	reject
Report Characteristics	M		9.2.1.51		YES	reject
SFN Reporting Indicator	M		FN		YES	reject

			Reporting Indicator 9.2.1.29B			
SFN	O		9.2.1.53A		YES	reject
Common Measurement Accuracy	O		9.2.1.9B		YES	reject

Range Bound	Explanation
$maxNoMeasNCells$	Maximum number of neighbouring cells that can be measured on.

9.1.19 COMMON MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE Common-Common Measurement Object Type	O			Common Measurement Object Type that the measurement was initiated with.	YES	ignore
\geq Cell					YES	
\geq Common Measurement Value	M		9.2.1.12		–	
\geq RACH				FDD only	–	
\geq Common Measurement Value	M		9.2.1.12		–	
\geq CPOCH				FDD only	–	
\geq Common Measurement Value	M		9.2.1.12		–	
SFN	O		9.2.1.53A	Common Measurement Time Reference	YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore
Common Measurement Achieved Accuracy	O		Common Measurement Accuracy 9.2.1.9B		YES	ignore

9.1.20 COMMON MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.21 COMMON MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE <i>Common Common Measurement Object Type</i>	M			Common Measurement Object Type that the measurement was initiated with.	YES	ignore
<i>>>Cell</i>					–	
<i>>>Common Measurement Value Information</i>	M		9.2.1.12A		–	
<i>>>RACH</i>				FDD only	–	
<i>>>Common Measurement Value Information</i>	M		9.2.1.12A		–	
<i>>>CPCH</i>				FDD only	–	
<i>>>Common Measurement Value Information</i>	M		9.2.1.12A			
SFN	O		9.2.1.53A	Common Measurement Time Reference	YES	ignore

9.1.22 COMMON MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore

9.1.23 COMMON MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore

9.1.24 CELL SETUP REQUEST

9.1.24.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Local Cell ID	M		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
T Cell	M		9.2.2.49		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nu [14]	YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nd [14]	YES	reject

Maximum Transmission Power	M		9.2.1.40		YES	reject
Closed Loop Timing Adjustment Mode	O		9.2.2.2A		YES	reject
Primary Scrambling Code	M		9.2.2.34		YES	reject
Synchronisation Configuration		14			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		-	
>N_OUTSYNC_IND	M		9.2.1.47B		-	
>T_RLFAILURE	M		9.2.1.56A		-	
DL TPC p _P Pattern 01 e _C Count	M		9.2.2.13A		YES	reject
Primary SCH Information		14			YES	reject
>Common Physical Channel ID	M		9.2.1.13		-	
>Primary SCH Power	M		DL Power 9.2.1.21		-	
>TSTD Indicator	M		9.2.1.64		-	
Secondary SCH Information		14			YES	reject
>Common Physical Channel ID	M		9.2.1.13		-	
>Secondary SCH p _P Power	M		DL Power 9.2.1.21		-	
>TSTD Indicator	M		9.2.1.64		-	
Primary CPICH Information		14			YES	reject
>Common Physical Channel ID	M		9.2.1.13		-	
>Primary CPICH power	M		9.2.2.33		-	
>Transmit Diversity Indicator	M		9.2.2.53		-	
Secondary CPICH Information		0..<maxS CPICHCell >0..<maxS CPICHCell >			EACH	reject
>Common Physical Channel ID	M		9.2.1.13		-	
>DL Scrambling e _C Code	M		9.2.2.13		-	
>FDD DL Channelisation Code Number	M		9.2.2.14		-	
>Secondary CPICH Power	M		DL Power 9.2.1.21		-	
>Transmit Diversity Indicator	M		9.2.2.53		-	
Primary CCPCH Information		14			YES	reject
>Common Physical Channel ID	M		9.2.1.13		-	
>>BCH Information		14			-	
>>Common Transport Channel ID	M		9.2.1.14		-	
>>BCH Power	M		DL Power 9.2.1.21		-	
>STTD Indicator	M		9.2.2.48		-	
Limited p_PPower i_Increase i_Information		14			YES	reject
>Power_Raise_Limit	M		9.2.2.29A		-	
>DL_power_averaging_window_size	M		9.2.2.12A		-	
IPDL Parameter Information		0..10..1			YES	reject
>IPDL FDD Parameters	M		9.2.2.18C		-	
>IPDL Indicator	M		9.2.1.36F		-	

Range b _B Bound	Explanation
maxSCPICHCell/MaxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.

9.1.24.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Local Cell ID	M		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation Id	M		9.2.1.16		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nt [15]	YES	reject
Cell Parameter ID	M		9.2.3.4		YES	reject
Maximum Transmission Power	M		9.2.1.40		YES	reject
Transmission Diversity Applied	M		9.2.3.26	On DCHs	YES	reject
Sync Case	M		9.2.3.18		YES	reject
Synchronisation Configuration		14			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		–	
>N_OUTSYNC_IND	M		9.2.1.47B		–	
>T_RLFAILURE	M		9.2.1.56A		–	
DPCH Constant Value	M		Constant Value		YES	reject
PUSCH Constant Value	M		Constant Value		YES	reject
PRACH Constant Value	M		Constant Value		YES	reject
Timing Advance Applied	M		9.2.3.22A		YES	reject
SCH Information		0..10..4		Mandatory Ffor 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD. only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>CHOICE Sync Case	M				YES	reject
>>>>Case 1					–	
>>>Time Slot	M		9.2.3.23		–	
>>>>Case 2					–	
>>>SCH Time Slot	M		9.2.3.17		–	
>SCH Power	M		DL Power 9.2.1.21		–	
>TSTD Indicator	M		9.2.1.64		–	
PCCPCH Information		0..10..4		Mandatory Ffor 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD. only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>TDD Physical Channel Offset	M		9.2.3.20		–	
>Repetition Period	M		9.2.3.16		–	
>Repetition Length	M		9.2.3.15		–	
>PCCPCH Power	M		9.2.3.9		–	
>SCTD Indicator	M		9.2.3.30		–	
Time Slot Configuration		0..150..15		Mandatory Ffor 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD. only	GLOBAL	reject
>Time Slot	M		9.2.3.23		–	

>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	
Time Slot Configuration LCR		0..7		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD. only	GLOBAL	reject
>Time Slot LCR	M		9.2.3.24A		–	
>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	
PCCPCH Information LCR		0..4		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD. only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>TDD Physical Channel Offset	M		9.2.3.20		–	
>Repetition Period	M		9.2.3.16		–	
>Repetition Length	M		9.2.3.15		–	
>PCCPCH Power	M		9.2.3.9		–	
>SCTD Indicator	M		9.2.3.30		–	
→TSTD Indicator	M		9.2.1.64		–	
DwPCH Information		0..4		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD. only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>TSTD Indicator	M		9.2.1.64		–	
>SYNC_DL Code ID	M		9.2.3.18B		–	
>DwPCH Power	M		9.2.3.5B		–	
Reference SFN Offset	O		9.2.3.14B		YES	ignore
IPDL Parameter Information		0..4		Applicable to 3.84Mcps TDD only	YES	reject
>IPDL TDD Parameters	M		9.2.3.5D		–	
>IPDL Indicator	M		9.2.1.36F		–	

9.1.25 CELL SETUP RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.26 CELL SETUP FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.27 CELL RECONFIGURATION REQUEST

9.1.27.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Maximum Transmission Power	O		9.2.1.40		YES	reject
Synchronisation Configuration		<u>0..10,1</u>			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		–	
>N_OUTSYNC_IND	M		9.2.1.47B		–	
>T_RLFAILURE	M		9.2.1.56A		–	
Primary SCH Information		<u>0..10,1</u>			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Primary SCH pPower	M		DL Power 9.2.1.21		–	
Secondary SCH Information		<u>0..10,1</u>			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Secondary SCH pPower	M		DL Power 9.2.1.21		–	
Primary CPICH Information		<u>0..10,1</u>			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Primary CPICH pPower	M		9.2.2.33		–	
Secondary CPICH Information		<u>0..<maxSCPICHCell</u> <u>>0..<maxSCPICHCell</u> <u>></u>			YESEACH	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Secondary CPICH Power	M		DL Power 9.2.1.21		–	
Primary CCPCH Information		<u>0..10,1</u>			YES	reject
>>BCH Information		<u>14</u>			–	
>>Common Transport Channel ID	M		9.2.1.14		–	
>>BCH Power	M		DL Power 9.2.1.21		–	
IPDL Parameter Information		<u>0..10,1</u>			YES	reject
>IPDL FDD Parameters	O		9.2.2.18C		–	
>IPDL Indicator	M		9.2.1.36F		–	

Range bBound	Explanation
<u>maxSCPICHCell/MaxSCPICHCell</u>	Maximum number of Secondary CPICH that can be defined in a Cell.

9.1.27.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Synchronisation Configuration		0..10,1			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		–	
>N_OUTSYNC_IND	M		9.2.1.47B		–	
>T_RLFAILURE	M		9.2.1.56A		–	
Timing Advance Applied	O		9.2.3.22A	Applicable to For 3.84Mcps TDD only	YES	reject
SCH Information		0..10,1		Applicable to For 3.84Mcps TDD only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>SCH Power	M		DL Power 9.2.1.21		–	
PCCPCH Information		0..10,1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>PCCPCH Power	M		9.2.3.9		–	
Maximum Transmission Power	O		9.2.1.40		YES	reject
DPCH Constant Value	O		Constant Value		YES	reject
PUSCH Constant Value	O		Constant Value		YES	reject
PRACH Constant Value	O		Constant Value		YES	reject
Time Slot Configuration		0..150..15		Mandatory For 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD-only	GLOBAL	reject
>Time Slot	M		9.2.3.23		–	
>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	
Time Slot Configuration LCR		0..70..7		Mandatory For 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD-only	GLOBAL	reject
>Time Slot LCR	M		9.2.3.24A		–	
>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	
DwPCH Information		0..10..4		Mandatory For 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD-only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>DwPCH Power	M		9.2.3.5B		–	
IPDL Parameter Information		0..10..4			YES	reject
>IPDL TDD Parameters	O		9.2.3.5D		–	
>IPDL Indicator	M		9.2.1.36F		–	

9.1.28 CELL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.29 CELL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.30 CELL DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject

9.1.31 CELL DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.32 RESOURCE STATUS INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Indication Type	M		9.2.1.36		YES	ignore
CHOICE <i>Indication Type</i>	M				YES	ignore
> <i>No Failure</i>					–	
>>Local Cell Information		1..<maxLocalCellinNodeB>			EACH	ignore
>>>Local Cell ID	M		9.2.1.38		–	
>>>Add/Delete Indicator	M		9.2.1.1		–	
>>>DL or Global Capacity Credit	C-add		9.2.1.20B		–	
>>>UL Capacity Credit	O		9.2.1.65A		–	
>>>Common Channels Capacity Consumption Law	C-add		9.2.1.9A		–	
>>>Dedicated Channels Capacity Consumption Law	C-add		9.2.1.20A		–	
>>>Maximum DL Power Capability	C-add		9.2.1.39		–	
>>>Minimum Spreading Factor	C-add		9.2.1.47		–	
>>>Minimum DL Power Capability	C-add		9.2.1.46A		–	
>>>Local Cell Group ID	O		9.2.1.37A		–	
>>>Reference Clock Availability	C-add		9.2.3.14A	TDD only	YES	ignore
>>>>Local Cell Group Information		0..<maxLocalCellinNodeB>			EACH	ignore
>>>>Local Cell Group ID	M		9.2.1.37A		–	
>>>>DL or Global Capacity Credit	M		9.2.1.20B		–	
>>>>UL Capacity Credit	O		9.2.1.65A		–	
>>>>Common Channels Capacity Consumption Law	M		9.2.1.9A		–	
>>>>Dedicated Channels Capacity Consumption Law	M		9.2.1.20A		–	
> <i>Service Impacting</i>					–	
>>Local Cell Information		0..<maxLocalCellinNodeB>			EACH	ignore
>>>>Local Cell ID	M		9.2.1.38		–	
>>>>DL or Global Capacity Credit	O		9.2.1.20B		–	
>>>>UL Capacity Credit	O		9.2.1.65A		–	
>>>>Common Channels Capacity Consumption Law	O		9.2.1.9A		–	

>>>Dedicated Channels Capacity Consumption Law	O		9.2.1.20A		-	
>>>Maximum DL Power Capability	O		9.2.1.39		-	
>>>Minimum Spreading Factor	O		9.2.1.47		-	
>>>Minimum DL Power Capability	O		9.2.1.46A		-	
>>>Reference Clock Availability	O		9.2.3.14A	TDD only	YES	ignore
>>>>Local Cell Group Information		0..<maxLocalCellinNodeB>			EACH	ignore
>>>Local Cell Group ID	M		9.2.1.37A		-	
>>>DL or Global Capacity Credit	O		9.2.1.20B		-	
>>>UL Capacity Credit	O		9.2.1.65A		-	
>>>Common Channels Capacity Consumption Law	O		9.2.1.9A		-	
>>>Dedicated Channels Capacity Consumption Law	O		9.2.1.20A		-	
>>Communication Control Port Information		0..<maxCCPi nNodeB>			EACH	ignore
>>>Communication Control Port ID	M		9.2.1.15		-	
>>>Resource Operational State	M		9.2.1.52		-	
>>>Availability Status	M		9.2.1.2		-	
>>Cell Information		0..<maxCelli nNodeB>			EACH	ignore
>>>C-ID	M		9.2.1.9		-	
>>>Resource Operational State	O		9.2.1.52		-	
>>>Availability Status	O		9.2.1.2		-	
>>>Primary SCH Information	O		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore
>>>Secondary SCH Information	O		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore
>>>Primary CPICH Information	O		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore
>>>Secondary CPICH Information		0..<maxS CPICHCell >		FDD only	EACH	ignore

>>>>Secondary CPICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>Primary CCPCH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>>>BCH Information	O		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>>>Secondary CCPCH Information		$0..<maxS\ CCPCHCell>$			EACH	ignore
>>>>Secondary CCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>PCH Information	O		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>>>PICH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>>>FACH Information		$0..<maxFACHCell>$			EACH	ignore
>>>>FACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>>>PRACH Information		$0..<maxPRACHCell>$			EACH	ignore
>>>>PRACH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>RACH Information		$0..<maxPRACHCell>$			EACH	ignore
>>>>RACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>>>AICH Information		$0..<maxPRA$		FDD only	EACH	ignore

		<i>CHCell</i> >				
>>>>AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>PCPCH Information		<i>0..<maxP CPCHCell ></i>		FDD only	EACH	ignore
>>>>PCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>CPCH Information		<i>0..<maxCPC HCell></i>		FDD only	EACH	ignore
>>>>CPCH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>>>AP-AICH Information		<i>0..<maxCPC HCell></i>		FDD only	EACH	ignore
>>>>AP-AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>CD/CA-ICH Information		<i>0..<maxCPC HCell></i>		FDD only	EACH	ignore
>>>>CD/CA-ICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>SCH Information	O		Common Physical Channel Status Information 9.2.1.13A	Applicable to 3.84Mcps TDD only	YES	ignore
>>>FPACH Information		<i>0..<maxFPA CHCell></i>		Applicable to Fes 1.28Mcps TDD only	EACH	ignore
–>>>>FPACH – Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>>DwPCH Information>>>>DwPCH Information	O		Common Physical Channel Status Information 9.2.1.13A	Applicable to Fes 1.28Mcps TDD only	YES	ignore
Cause	O		9.2.1.6		YES	ignore

Condition	Explanation
add	The IE shall be present if the <i>Add/Delete Indicator</i> IE is set to "Add".

Range bBound	Explanation
<i>M</i> maxLocalCellinNodeB	Maximum number of Local Cells that can exist in the Node B
<i>M</i> maxCellinNodeB	Maximum number of <i>C-ID</i> s that can be configured in the Node B
<i>M</i> maxCPCHCell	Maximum number of CPCHes that can be defined in a Cell
<i>M</i> maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.
<i>M</i> maxSCCPCHCell	Maximum number of Secondary CCPCHs that can be defined in a Cell.
<i>M</i> maxFACHCell	Maximum number of FACHes that can be defined in a Cell
<i>M</i> maxPCPCHCell	Maximum number of PCPCHes that can be defined in a Cell
<i>max</i> PRACHCell/ <i>Max</i> PRACHCell	Maximum number of PRACHes and AICHes that can be defined in a Cell
<i>M</i> maxCCPinNodeB	Maximum number of eCommunication eControl pPorts that can exist in the Node B
<i>M</i> maxFPACHCell	Maximum number of FPACHes that can be defined in a Cell

9.1.33 SYSTEM INFORMATION UPDATE REQUEST

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
BCCH Modification Time	O		9.2.1.3		YES	reject
MIB/SB/SIBInformation		1.. <maxIB>			GLOBAL	reject
>IB Type	M		9.2.1.35		–	
>IB OC ID	M		9.2.1.31A	In one message, every occurrence of IB Type can only be deleted once and/or added once.	–	
>CHOICE <i>IB Deletion Indicator</i>	M				–	
>> <i>No Deletion</i>					–	
>>>SIB Originator	C-SIB		9.2.1.55		–	
>>>IB SG REP	O		9.2.1.34		–	
>>>Segment Information		1.. <maxIBSEG>			GLOBAL	reject
>>>>IB SG POS	O		9.2.1.33		–	
>>>>Segment tType	C- CRNCO rigin ation		9.2.1.53B		–	
>>>>IB SG DATA	C- CRNCO rigin ation		9.2.1.32		–	
>>>> <i>Deletion</i>			NULL		–	

Range bBound	Explanation
1..maxIB	Maximum number of information Blocks supported in one message.
1..maxIBSEG	Maximum number of segments for one Information Block

Condition	Explanation
CRNCOriination	The IE shall be present if the <i>SIB Originator</i> IE is set to "CRNC" or if the <i>IB Type</i> IE is set to "MIB", "SB1" or "SB2".
SIB	The IE shall be present if the <i>IB Type</i> IE is set to "SIB".

9.1.34 SYSTEM INFORMATION UPDATE RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.35 SYSTEM INFORMATION UPDATE FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.36 RADIO LINK SETUP REQUEST

9.1.36.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL DPCH Information		14			YES	reject
>UL Scrambling Code	M		9.2.2.59		–	
>Min UL Channelisation Code Length	M		9.2.2.22		–	
>Max Number of UL DPCHs	C-CodeLen		9.2.2.21		–	
>Puncture Limit	M		9.2.1.50	For UL	–	
>TFCS	M		9.2.1.58	For UL	–	
>UL DPCH Slot Format	M		9.2.2.57		–	
> UL SIR Target	M		UL SIR 9.2.1.67A		–	
>Diversity Mode	M		9.2.2.9		–	
>SSDT Cell ID Length	O		9.2.2.45		–	
>S Field Length	O		9.2.2.40		–	
>DPC Mode	O		9.2.2.13C		YES	reject
DL DPCH Information		14			YES	reject
>TFCS	M		9.2.1.58	For DL	–	
>DL DPCH Slot Format	M		9.2.2.10		–	
>TFCI Signalling Mode	M		9.2.2.50		–	
>TFCI Presence	C-SlotFormat		9.2.1.57		–	
>Multiplexing Position	M		9.2.2.23		–	
>PDSCH RL ID	C-DSCH		RL ID 9.2.1.53		–	
>PDSCH Code Mapping	C-DSCH		9.2.2.25		–	
>Power Offset Information		14			–	
>>PO1	M		Power Offset 9.2.2.29	Power offset for the TFCI bits	–	
>>PO2	M		Power Offset 9.2.2.29	Power offset for the TPC bits	–	
>>PO3	M		Power Offset 9.2.2.29	Power offset for the pilot bits	–	
>FDD TPC DL Step Size	M		9.2.2.16		–	
>Limited Power Increase	M		9.2.2.18A		–	
>Inner Loop DL PC Status	M		9.2.2.18B		–	
DCH Information	M		DCH FDD Information 9.2.2.4D		YES	reject
DSCH Information	O		DSCH FDD Information 9.2.2.13B		YES	reject

TFCI2 bearer information		0..10..4			YES	ignore
>ToAWS	M		9.2.1.61		-	
>ToAWE	M		9.2.1.60		-	
RL Information		1..<maxno ofRLs>1 to <maxneof RLs>			EACH	notify
>RL ID	M		9.2.1.53		-	
>C-ID	M		9.2.1.9		-	
>First RLS Indicator	M		9.2.2.16A		-	
>Frame Offset	M		9.2.1.31		-	
>Chip Offset	M		9.2.2.2		-	
>Propagation Delay	O		9.2.2.35		-	
>Diversity Control Field	C- NotFirstRL		9.2.1.25		-	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		-	
>Initial DL tTransmission Power	M		DL Power 9.2.1.21	Initial power on DPCH	-	
>Maximum DL pPower	M		DL Power 9.2.1.21	Maximum allowed power on DPCH	-	
>Minimum DL pPower	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	-	
>SSDT Cell Identity	O		9.2.2.44		-	
>Transmit Diversity Indicator	C- Diversity mode		9.2.2.53		-	
>SSDT Cell Identity fFor EDSCHPC	C- EDSCHPC		9.2.2.44A		YES	ignore
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject
Active Pattern Sequence Information	O		9.2.2.A		YES	reject
DSCH Common Information	O		DSCH FDD Common Information 9.2.2.13D		YES	ignore

Condition	Explanation
CodeLen	The IE shall be present if <i>Min UL Channelisation Code Length</i> IE equals to 4.
NotFirstRL	The IE shall be present if the RL is not the first one in the <i>RL Information</i> IE.
DSCH	The IE shall be present if the <i>DSCH Information</i> IE is present.
SlotFormat	The IE shall be present if the <i>DL DPCH Slot Format</i> IE is equal to any of the values from 12 to 16.
Diversity mode	The IE shall be present if <i>Diversity Mode</i> IE in <i>UL DPCH Information</i> IE is not set to "none".
EDSCHPC	The IE shall be present if <i>Enhanced DSCH PC</i> IE is present in the <i>DSCH Common Information</i> IE.

Range bBound	Explanation
maxnoofRLsMaxnoofRLs	Maximum number of RLs for one UE.

9.1.36.2 TDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNCCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCTrCH Information		$0..<maxno\ CCTrCH>$ 0 to <maxno CCTrCH>			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
>UL SIR Target	O		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD; not applicable for 3.84Mcps TDD	YES	reject
>UL DPCH Information		$0..10..4$		Applicable to For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH Information LCR		$0..10..4$		Applicable to For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
>UL SIR Target	O		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
DL CCTrCH Information		$0..<maxno\ CCTrCH>$ 0 to <maxno CCTrCH>			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
>TDD TPC DL Step Size	M		9.2.3.21		–	
>TPC CCTrCH List		$0..<maxno\ CCTrCH>$ 0 to <maxnoC		List of uplink CCTrCH which provide TPC	–	

		CTrCH				
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		-	
>DL DPCH information		0..10..1		Applicable to For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>DL Timeslot Information	M		9.2.3.4E		-	
>DL DPCH information LCR		0..10..1		Applicable to For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>DL Timeslot Information LCR	M		9.2.3.4O		-	
>>TSTD Indicator	M		9.2.1.64		-	
DCH Information	O		DCH TDD Information 9.2.3.4C		YES	reject
DSCH Information	O		DSCH TDD Information 9.2.3.5A		YES	reject
USCH Information	O		9.2.3.28		YES	reject
RL Information		14			YES	reject
>RL ID	M		9.2.1.53		-	
>C-ID	M		9.2.1.9		-	
>Frame Offset	M		9.2.1.31		-	
>Special Burst Scheduling	M		9.2.3.18A		-	
>Initial DL t Transmission Power	M		DL Power 9.2.1.21	Initial power on DPCH	-	
>Maximum DL p Power	M		DL Power 9.2.1.21	Maximum allowed power on DPCH	-	
>Minimum DL p Power	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	-	
>DL Time Slot ISCP Info	O		9.2.3.4F	Applicable to For 3.84Mcps TDD only	-	
>DL Time Slot ISCP Info LCR	O		9.2.3.40A	Applicable to For 1.28Mcps TDD only	YES	reject

Range b Bound	Explanation
maxnoCCTrCH MaxnoGGTrCH	Number of CCTrCHs for one UE.

9.1.37 RADIO LINK SETUP RESPONSE

9.1.37.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		-	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All-NBCC" shall not be used.	YES	ignore
Communication Control Port ID	M		9.2.1.15		YES	ignore
RL Information Response		1..<maxno ofRLs>1 to <maxno ofRLs>			EACH	ignore
>RL ID	M		9.2.1.53		-	
>RL Set ID	M		9.2.2.39			
>Received Total Wideband Power	M		9.2.2.39A		-	
>Diversity Indication	C-NotFirstRL		9.2.1.26		-	
>CHOICE Diversity Indication	M				-	
>>Combining					-	
>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	-	
>>Non Combining or First RL					-	
>>>DCH Information Response	M		9.2.1.20C		-	
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>SSDT Support Indicator	M		9.2.2.46		-	
TFCI2 Bearer Information Response	O		9.2.2.49A		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Condition	Explanation
NotFirstRL	The IE shall be present if the RL is not the first one in the RL Information Response IE.

Range Bound	Explanation
maxno ofRLsMaxno ofRLs	Maximum number of RLs for one UE.

9.1.37.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	ignore
Communication Control Port ID	M		9.2.1.15		YES	ignore
RL Information Response		0..10..4		Mandatory For 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD_only	YES	ignore
>RL ID	M		9.2.1.53		–	
>UL Time Slot ISCP Info	M		9.2.3.26D		–	
>UL PhysCH SF Variation	M		9.2.3.26B		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.28		YES	ignore
RL Information Response LCR		0..10..4		Mandatory For 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD_only	YES	ignore
>RL ID	M		9.2.1.53		–	
>UL Time Slot ISCP Info LCR	M		9.2.3.26F		–	
>UL PhysCH SF Variation	M		9.2.3.26B		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.28		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.38 RADIO LINK SETUP FAILURE

9.1.38.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	C-Success		9.2.1.48	The reserved value "All-NBCC" shall not be used	YES	ignore
Communication Control Port ID	O		9.2.1.15		YES	ignore
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		–	
>RL sSpecific					–	
>>Unsuccessful RL Information Response		1..<maxno ofRLs>1 to <maxno of RLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>>Successful RL Information Response		0..<maxno ofRLs>0 to <maxno of RLs-1>		Note: There will never be maxnoofRLs repetitions of this sequence.	EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>RL Set ID	M		9.2.2.39			
>>>Received tTotal wWide bBand pPower	M		9.2.2.39A		–	
>>>Diversity Indication	C-NotFirstRL		9.2.1.26		–	
>>>CHOICE Diversity Indication	M				–	
>>>>Combining					–	
>>>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	–	
>>>>>Non Combining or First RL					–	
>>>>>DCH Information Response	M		9.2.1.20C		–	
>>>DSCH Information Response	O		9.2.1.27A		YES	ignore
>>>TFCI2 Bearer Information Response	O		9.2.2.49A		–	
>>>SSDT Support Indicator	M		9.2.2.46		–	

Criticality Diagnostics	O		9.2.1.17		YES	ignore
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Condition	Explanation
Success	The IE shall be present if at least one of the radio links has been successfully set up.
NotFirstRL	The IE shall be present if the RL is not the first one in the Successful RL Information Response IE.

Range bBound	Explanation
maxnoofRLsMaxnoofRLs	Maximum number of RLs for one UE.

9.1.38.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		–	
>RL sSpecific					–	
>>Unsuccessful RL Information Response		41			YES	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.39 RADIO LINK ADDITION REQUEST

9.1.39.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
Compressed Mode Deactivation Flag	O		9.2.2.3A		YES	reject
RL Information		1..<maxno ofRLs-1>			EACH	notify
>RL ID	M		9.2.1.53		–	
>C-ID	M		9.2.1.9		–	
>Frame Offset	M		9.2.1.31		–	
>Chip Offset	M		9.2.2.2		–	
>Diversity Control_Field	M		9.2.1.25		–	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		–	
>Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	–	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>SSDT Cell Identity	O		9.2.2.44		–	
>Transmit Diversity Indicator	O		9.2.2.53		–	

Range Bound	Explanation
$M_{maxnoofRLs}$	Maximum number of RLs for one UE

9.1.39.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All-NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCTrCH Information		<i>0..<maxno CCTrCH> 0 to <maxno CCTrCH></i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
>UL DPCH Information		<i>0..10..4</i>		Applicable to For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH Information LCR		<i>0..10..4</i>		Applicable to For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
DL CCTrCH Information		<i>0..<maxno CCTrCH> 0 to <maxno CCTrCH></i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
>DL DPCH information		<i>0..10..4</i>		Applicable to For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH information LCR		<i>0..10..4</i>		Applicable to For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.4O		–	
RL Information		<i>11</i>			YES	reject
>RL ID	M		9.2.1.53		–	
>C-ID	M		9.2.1.9		–	
>Frame Offset	M		9.2.1.31		–	

>Diversity Control Field	M		9.2.1.25		–	
>Initial DL t ransmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	–	
>Maximum DL p Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL p Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>DL Time Slot ISCP Info	O		9.2.3.4F	Applicable to For 3.84Mcps TDD only	–	
>DL Time Slot ISCP Info LCR	O		9.2.3.40A	Applicable to For 1.28Mcps TDD only	YES	reject

Range b Bound	Explanation
maxnoCCTrCH MaxnoCCTrCH	Number of CCTrCH for one UE.

9.1.40 RADIO LINK ADDITION RESPONSE

9.1.40.1 FDD message

IE/Group Name	Presence	Range	IE t Type and r Reference	Semantics d Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information Response		$1..<1..<maxnoofRLs-1>$			EACH	ignore
>RL ID	M		9.2.1.53		–	
>RL Set ID	M		9.2.2.39		–	
>Received t Total w ide b Band p Power	M		9.2.2.39A		–	
>Diversity Indication	M		9.2.1.26		–	
>CHOICE Diversity Indication	M				–	
>>Combining					–	
>>>RL ID	M		9.2.1.53	Reference RL	–	
>>Non e Combining					–	
>>>DCH Information Response	M		9.2.1.20C		–	
>SSDT s Support i ndicator	M		9.2.2.46		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range b Bound	Explanation
M maxnoofRLs	Maximum number of RLs for one UE

9.1.40.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62			
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62			
RL Information Response		0..10..4		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD only	YES	ignore
>RL ID	M		9.2.1.53		-	
>UL Time Slot ISCP Info	M		9.2.3.26D		-	
>UL PhysCH SF Variation	M		9.2.3.26B		-	
>DCH Information		0..10..4			-	
>>Diversity Indication	M		9.2.1.26			
>>CHOICE Diversity Indication	M				-	
>>>Combining				In TDD it indicates whether the old Transport Bearer shall be reused or not	-	
>>>>RL ID	M		9.2.1.53	Reference RL	-	
>>>>>Non Combining					-	
>>>>DCH Information Response	M		9.2.1.20C		-	
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore
RL Information Response LCR		0..10..4		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD only	YES	ignore
>RL ID	M		9.2.1.53		-	
>UL Time Slot ISCP Info LCR	M		9.2.3.26F		-	
>UL PhysCH SF Variation	M		9.2.3.26B		-	
>DCH Information		0..10..4			-	
>>Diversity Indication	M		9.2.1.26			
>>CHOICE Diversity indication	M				-	
>>>Combining				In TDD it indicates whether the old Transport Bearer shall be reused or not	-	
>>>>RL ID	M		9.2.1.53	Reference RL	-	
>>>>>Non Combining					-	

>>>>DCH Information Response	M		9.2.1.20C		-	
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29		YES	ignore

9.1.41 RADIO LINK ADDITION FAILURE

9.1.41.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62			
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62			
CHOICE Cause Level	M				YES	ignore
>General					-	
>>Cause	M		9.2.1.6		-	
>RL sSpecific					-	
>>Unsuccessful RL Information Response		1..<1..<maxnoofRLs-1>			EACH	ignore
>>>RL ID	M		9.2.1.53		-	
>>>Cause	M		9.2.1.6		-	
>>Successful RL Information Response		0..<0..<maxnoofRLs-2>			EACH	ignore
>>>RL ID	M		9.2.1.53		-	
>>>RL Set ID	M		9.2.2.39			
>>> Received Total Wide Band Power	M		9.2.2.39A		-	
>>>Diversity Indication	M		9.2.1.26			
>>>CHOICE Diversity Indication	M				-	
>>>>Combining					-	
>>>>>RL ID	M		9.2.1.53	Reference RL	-	
>>>>Non Combining					-	
>>>>>DCH Information Response	M		9.2.1.20C		-	
>>>SSDT Support Indicator	M		9.2.2.46		-	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range bBound	Explanation
MmaxnoofRLs	Maximum number of RLs for one UE

9.1.41.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		–	
>RL sSpecific					–	
>>Unsuccessful RL Information Response		14			YES	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.42 RADIO LINK RECONFIGURATION PREPARE

9.1.42.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL DPCH Information		0..1			YES	reject
>UL Scrambling eCode	O		9.2.2.59		–	
>UL SIR Target	O		UL SIR 9.2.1.67A		–	
>Min UL Channelisation Code Length	O		9.2.2.22		–	
>Max Number of UL DPDCHs	C-CodeLen		9.2.2.21		–	
>Puncture Limit	O		9.2.1.50	For UL	–	
>TFCS	O		9.2.1.58		–	
>UL DPCCH Slot Format	O		9.2.2.57		–	
>Diversity mMode	O		9.2.2.9		–	
>SSDT Cell Identity Length	O		9.2.2.45		–	
>S-Field Length	O		9.2.2.40		–	
DL DPCH Information		0..1			YES	reject
>TFCS	O		9.2.1.58		–	
>DL DPCH Slot Format	O		9.2.2.10		–	
>TFCI Signalling Mode	O		9.2.2.50		–	
>TFCI pPresence	C-Slot Format		9.2.1.57		–	
>Multiplexing Position	O		9.2.2.23		–	
>PDSCH eCode mMapping	O		9.2.2.25		–	
>PDSCH RL ID	O		RL ID 9.2.1.53		–	
>Limited Power Increase	O		9.2.2.18A		–	
DCHs tTo Modify	O		DCHs FDD tTo Modify 9.2.2.4E		YES	reject
DCHs tTo Add	O		DCH FDD Information 9.2.2.4D		YES	reject
DCHs tTo Delete		0..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
DSCH tTo mModify		0..<maxno ofDSCHs>			YESEACH	reject
>DSCH ID	M		9.2.1.27		–	
>Transport Format Set	O		9.2.1.59	For the DL.	–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>Frame Handling Priority	O		9.2.1.30		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	

>Transport Bearer Request – Indicator	M		9.2.1.62A		–	
DSCH T o aAdd	O		DSCH FDD Information 9.2.2.13B		YES	reject
DSCH To Delete		0..<maxno ofDSCHs>			YESEACH	reject
>DSCH ID	M		9.2.1.27		–	
TFCI2 bBearer specific iInformation		0..10..4			YES	reject
>CHOICE - TFCI2 bBearer aAction	M				–	
>>Add or mModify					–	
>>>ToAWS	M		9.2.1.61		–	
>>>ToAWE	M		9.2.1.60		–	
>>Delete			NULL		–	
RL Information		0..<maxno ofRLs>			EACH	reject
>RL ID	M		9.2.1.53		–	
>DL Code Information	O		FDD DL Code Information 9.2.2.14A		–	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>SSDT Indication	O		9.2.2.47		–	
>SSDT Cell Identity	C- SSDTIndO N		9.2.2.44		–	
>Transmit Diversity Indicator	C- Diversity mode		9.2.2.53		–	
>SSDT Cell Identity fFor EDSCHPC	C- EDSCHPC		9.2.2.44A		YES	ignore
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject
DSCH Common Information	O		DSCH FDD Common Information 9.2.2.13D		YES	ignore

Condition	Explanation
SSDTIndON	The IE shall be present if the <i>SSDT Indication</i> IE is set to "SSDT Active in the UE".
CodeLen	The IE shall be present if the <i>Min UL Channelisation Code Length</i> IE is equal to 4.
SlotFormat	The IE shall be present if the <i>DL DPCH Slot Format</i> IE is equal to any of the values from 12 to 16.
Diversity mode	The IE shall be present if <u>the</u> <i>Diversity Mode</i> IE is present in the <i>UL DPCH Information</i> IE and is not set to "none".
EDSCHPC	The IE shall be present if <u>the</u> <i>Enhanced DSCH PC</i> IE is present in the <i>DSCH Common Information</i> IE.

Range Bound	Explanation
<i>M_{maxnoofDCHs}</i>	Maximum number of DCHs for a UE.
<i>M_{maxnoofDSCHs}</i>	Maximum number of DSCHs for a UE.
<i>M_{maxnoofRLs}</i>	Maximum number of RLs for a UE.

9.1.42.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCTrCH \daggerTo Add		<i>0..<maxno of CCTrCHs></i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
>UL SIR Target	O		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD; not applicable for 3.84Mcps TDD	YES	reject
>UL DPCH Information		0..1		Applicable to For 3.84Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH Information LCR		0..1		Applicable to For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
>UL SIR Target	O		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD; not Applicable to 3.84Mcps TDD	YES	reject
UL CCTrCH \daggerTo Modify		<i>0..<maxno of CCTrCHs></i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>TFCI Coding	O		9.2.3.22		–	
>Puncture Limit	O		9.2.1.50		–	
>UL SIR Target	O		UL SIR 9.2.1.67A	For 1.28Mcps TDD only	YES	reject
>UL DPCH \dagger To aAdd		0..1		Applicable to	YES	reject

				For 3.84Mcps TDD only		
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>UL Timeslot Information	M		9.2.3.26C		-	
>UL DPCH t To m Modify		0..1			YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD DPCH Offset	O		9.2.3.19A		-	
>>UL Timeslot Information		0..<maxno ofULts>0 to <maxnoof ULts>		Applicable to For 3.84Mcps TDD only	-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift a And Burst Type	O		9.2.3.7		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>UL Code Information		0..<maxno ofDPCHs>0 to <maxnoOf DPCH>			-	
>>>>DPCH ID	M		9.2.3.5		-	
>>>>TDD Channelisation Code	O		9.2.3.19		-	
>>UL Timeslot Information LCR		0..<maxno ofULtsLCR>0 to <Maxnoof ULtsLCR>		Applicable to For 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble s Shift LCR	O		9.2.3.7A		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>>UL Code Information LCR		0..<maxno ofDPCHsL CR>0 to <maxnoOf DPCHLCR>			-	
>>>>DPCH ID	M		9.2.3.5		-	
>>>>TDD Channelisation Code LCR	O		9.2.3.19a		-	
>UL DPCH t To d Delete		0..<maxno ofDPCHs><maxnoof DPCHs>			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		-	
>UL DPCH t To a Add LCR		0..1		Applicable to For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>UL Timeslot Information LCR	M		9.2.3.26E		-	
>UL SIR Target	O		UL SIR 9.2.1.67A	Applicable to 1.28Mcps TDD	YES	reject

UL CCTrCH to Delete		<i>0..<maxno ofCCTrCHs></i>		only	GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
DL CCTrCH to Add		<i>0..<maxno ofCCTrCHs></i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture_Limit	M		9.2.1.50		–	
>TPC CCTrCH List		<i>0..<maxno ofCCTrCHs></i>		List of uplink CCTrCH which provide TPC	–	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
>DL DPCH Information		<i>0..1</i>		Applicable to Fdd 3.84Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH Information LCR		<i>0..1</i>		Applicable to Fdd 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.4O		–	
DL CCTrCH to Modify		<i>0..<maxno ofCCTrCHs></i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>TFCI Coding	O		9.2.3.22		–	
>Puncture_Limit	O		9.2.1.50		–	
>TPC CCTrCH List		<i>0..<maxno ofCCTrCHs></i>		List of uplink CCTrCH which provide TPC	–	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
>DL DPCH to Add		<i>0..1</i>		Applicable to Fdd 3.84Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	

>>TDD DPCH Offset	M		9.2.3.19A		-	
>>DL Timeslot Information	M		9.2.3.4E		-	
>DL DPCH † To m Modify		0..1			YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD DPCH Offset	O		9.2.3.19A		-	
>>DL Timeslot Information		0..<maxno ofDLts>0..<maxnoof DLts>		Applicable to For 3.84Mcps TDD only	-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift a And Burst Type	O		9.2.3.7		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>DL Code Information		0..<maxno ofDPCHs>0..<maxnoOf DPCH>			-	
>>>>DPCH ID	M		9.2.3.5		-	
>>>>TDD Channelisation Code	O		9.2.3.19		-	
>>DL Timeslot Information LCR		0..<maxno ofDLtsLCR>0..<Maxnoof DLtsLCR>		Applicable to For 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble s Shift LCR	O		9.2.3.7A		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>DL Code Information LCR		0..<maxno ofDPCHsLCR>0..<maxnoOf DPCHLCR s>			-	
>>>>DPCH ID	M		9.2.3.5		-	
>>>>TDD Channelisation Code LCR	O		9.2.3.19a		-	
>DL DPCH † To d Delete		0..<maxno ofDPCHs>0..<maxnoof DPCHs>			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		-	
>DL DPCH † To a Add LCR		0..1		Applicable to For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>DL Timeslot Information LCR	M		9.2.3.4O		-	
DL CCTrCH † To Delete		0..<maxno ofCCTrCH s>0..<maxnoof CCTrCHs >			GLOBAL	reject

>CCTrCH ID	M		9.2.3.3		–	
DCHs t To Modify	O		DCHs TDD t To Modify 9.2.3.4D		YES	reject
DCHs t To Add	O		DCH TDD Information 9.2.3.4C		YES	reject
DCHs tTo Delete		<i>0..<maxno ofDCHs></i>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
DSCH Information tTo mModify		<i>0..<maxno ofDSCHs> 0.. <Maxnoof DSCHs></i>			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
>CCTrCH ID	O		9.2.3.3	DL CCTrCH in which the DSCH is mapped	–	
>Transport Format Set	O		9.2.1.59		–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>Frame Handling Priority	O		9.2.1.30		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	
>Transport Bearer Request – Indicator	M		9.2.1.62A		–	
DSCH Information t To aAdd	O		DSCH TDD Information 9.2.3.5A		YES	reject
DSCH Information tTo dDelete		<i>0..<maxno ofDSCHs> 0.. <Maxnoof DSCHs></i>			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
USCH Information tTo mModify		<i>0..<maxno ofUSCHs> 0.. <Maxnoof USCHs></i>			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
>Transport Format Set	O		9.2.1.59		–	
> Allocation/Retention Priority	O		9.2.1.1A		–	
>CCTrCH ID	O		9.2.3.2	UL CCTrCH in which the USCH is mapped	–	
>Transport Bearer Request – Indicator	M		9.2.1.62A		–	
USCH Information t To aAdd	O		USCH Information 9.2.3.28		YES	reject
USCH Information tTo dDelete		<i>0..<maxno ofUSCHs> 0.. <Maxnoof USCHs></i>			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
RL Information		<i>0..1</i>			YES	reject
>RL ID	M		9.2.1.53		–	

>Maximum Downlink Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum Downlink Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore

Range Bound	Explanation
$M_{maxnoofDCHs}$	Maximum number of DCHs for a UE.
$M_{maxnoofCCTrCHs}$	Maximum number of CCTrCHs for a UE.
$M_{maxnoofDPCHs}$	Maximum number of DPCHs in one CCTrCH for 3.84Mcps TDD.
$M_{maxnoofDPCHsLCRs}$	Maximum number of DPCHs in one CCTrCH for 1.28Mcps TDD.
$M_{maxnoofDSCHs}$	Maximum number of DSCHs for one UE
$M_{maxnoofUSCHs}$	Maximum number of USCHs for one UE
$M_{maxnoofDLts}$	Maximum number of Downlink time slots per Radio Link for 3.84Mcps TDD.
$M_{maxnoofDLtsLCR}$	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.
$M_{maxnoofULts}$	Maximum number of Uplink time slots per Radio Link for 3.84Mcps TDD.
$M_{maxnoofULtsLCR}$	Maximum number of Uplink time slots per Radio Link for 1.28Mcps TDD.

9.1.43 RADIO LINK RECONFIGURATION READY

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information Response		$0..<maxnoofRLs>$		Only one RL information response group for one group of combined RLs shall be present	EACH	ignore
>RL ID	M		9.2.1.53		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29	TDD only	YES	ignore
>TFCI2 Bearer Information Response	O		9.2.2.49A	FDD only	–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
$M_{maxnoofRLs}$	Maximum number of RLs for a UE.

9.1.44 RADIO LINK RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		YES	ignore
>RL sSpecific					–	
>>RLs Causing Reconfiguration Failure		0..<maxno ofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
$M_{maxnoofRLs}$	Maximum number of RLs for a UE.

9.1.45 RADIO LINK RECONFIGURATION COMMIT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CFN	M		9.2.1.7		YES	ignore
Active Pattern Sequence Information	O		9.2.2.A		YES	ignore

9.1.46 RADIO LINK RECONFIGURATION CANCEL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	

9.1.47 RADIO LINK RECONFIGURATION REQUEST

9.1.47.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL DPCH Information		0..1			YES	reject
>TFCS	O		9.2.1.58	For the UL.	–	
DL DPCH Information		0..1			YES	reject
>TFCS	O		9.2.1.58	For the DL.	–	
>TFCI Signalling Mode	O		9.2.2.50		–	
>Limited Power Increase	O		9.2.2.18A		–	
DCHs \dagger To Modify	O		DCHs FDD \dagger To Modify 9.2.2.4E		YES	reject
DCHs \dagger To Add	O		DCH FDD Information 9.2.2.4D		YES	reject
DCHs \daggerTo Delete		0..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
Radio Link Information		0..<maxno ofRLs>			EACH	reject
>RL ID	M		9.2.1.53		–	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>DL Code Information	C-SF/2		FDD DL Code Information 9.2.2.14A		–	
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject

Range Bound	Explanation
$M_{maxnoofDCHs}$	Maximum number of DCHs for a UE.
$M_{maxnoofRLs}$	Maximum number of RLs for a UE.

Condition	Explanation
SF/2	The IE shall be present if the <i>Transmission Gap Pattern Sequence Information</i> IE is included and the indicated Downlink Compressed Mode method for at least one of the included Transmission Gap Pattern Sequence is set to "SF/2".

9.1.47.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCH \mathbb{T} o mModify		$0..<maxno\ of\ CCHs>$			EACH	notify
>CCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>Puncture Limit	O		9.2.1.50		–	
UL CCH \mathbb{T} o dDelete		$0..<maxno\ of\ CCHs>$			EACH	notify
>CCH ID	M		9.2.3.3		–	
DL CCH \mathbb{T} o mModify		$0..<maxno\ of\ CCHs>$			EACH	notify
>CCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>Puncture Limit	O		9.2.1.50		–	
DL CCH \mathbb{T} o dDelete		$0..<maxno\ of\ CCHs>$			EACH	notify
>CCH ID	M		9.2.3.3		–	
DCHs \mathbb{T} o Modify	O		DCHs TDD \mathbb{T} o Modify 9.2.3.4D		YES	reject
DCHs \mathbb{T} o Add	O		DCH TDD Information 9.2.3.4C		YES	reject
DCHs \mathbb{T} o Delete		$0..<maxno\ of\ DSCHs>$			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
RL Information		$0..1$			YES	reject
>RL ID	M		9.2.1.53		–	
>Maximum Downlink Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum Downlink Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	

Range bBound	Explanation
$M_{maxnoofCCHs}$	Maximum number of CCHs for a UE.

9.1.48 RADIO LINK RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information Response		0..<maxno ofRLs>		Only one RL information response group for one group of combined RLs shall be present	EACH	ignore
>RL ID	M		9.2.1.53		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range bBound	Explanation
MmaxnoofRLs	Maximum number of RLs for a UE.

9.1.49 RADIO LINK DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
CRNC Communication Context ID	M		9.2.1.18		YES	reject
Transaction ID	M		9.2.1.62		–	
RL Information		1..<maxno ofRLs>			EACH	notify
>RL ID	M		9.2.1.53		–	

Range bBound	Explanation
MmaxnoofRLs	Maximum number of radio links for one UE

9.1.50 RADIO LINK DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		YES	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		YES	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.51 DL POWER CONTROL REQUEST [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		YES	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		YES	
Power Adjustment Type	M		9.2.2.27		YES	ignore
DL Reference Power	C-Common		DL power 9.2.1.21	Power on DPCH	YES	ignore
Inner Loop DL PC Status	O		9.2.2.18B		YES	ignore
DL Reference Power Information	C-Individual	1..<maxnofRLs>1..<maxnofRLs>			GLOBAL EACH	ignore
>RL ID	M		9.2.1.53		-	
>DL Reference Power	M		DL power 9.2.1.21	Power on DPCH	-	
Max Adjustment Step	C-CommonOrIndividual		9.2.2.20		YES	ignore
Adjustment Period	C-CommonOrIndividual		9.2.2.B		YES	ignore
Adjustment Ratio	C-CommonOrIndividual		9.2.2.C		YES	ignore

Condition	Explanation
Common	The IE shall be present if the 'Adjustment Type IE is equal to "Common".
Individual	The IE shall be present if the Adjustment Type IE is equal to "Individual".
CommonOrIndividual	The IE shall be present if the Adjustment Type IE is equal to "Common" or "Individual".

Range Bound	Explanation
maxnofRLsMaxnofRLs	Maximum number of Radio Links for a UE

9.1.52 DEDICATED MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used when the Report characteristics type is set to "On-Demand".	YES	reject
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	reject
Dedicated Measurement Object Type	M		9.2.1.22		YES	reject
CHOICE <i>Dedicated Measurement Object Type</i>	M				YES	reject
>>RL					–	
>>RL Information		<i>1..<maxno ofRLs>1..<maxnoofRLs></i>			EACH	reject
>>>RL ID	M		9.2.1.53		–	
>>>DPCH ID	O		9.2.3.5	TDD only	–	
>>>>>PUSCH Information		<i>0..<maxno ofPUSCHs>0..<maxnoofPUSCHs></i>		TDD only	EACHGLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		–	
>>RLS				FDD only	–	
>>RL Set Information		<i>1..<maxno ofRLSets>1..<maxno ofRLSets></i>			–	
>>>RL Set ID	M		9.2.2.39		–	
>>ALL RL			NULL		–	
>>ALL RLS			NULL	FDD only	–	
Dedicated Measurement Type	M		9.2.1.23		YES	reject
Measurement Filter Coefficient	O		9.2.1.41		YES	reject
Report Characteristics	M		9.2.1.51		YES	reject
CFN <i>r</i> Reporting <i>i</i> ndicator	M		FN <i>r</i> Reporting <i>i</i> ndicator 9.2.1.29B		YES	reject
CFN	O		9.2.1.7		YES	reject

Range Bound	Explanation
<i>M</i> maxnoofRLs	Maximum number of individual RL's a measurement can be started on-
<i>M</i> maxnoofPUSCHs	Maximum number of PUSCHs per RL a measurement can be started on-
<i>M</i> maxnoofRLSets	Maximum number of individual RL Sets a measurement can be started on-

9.1.53 DEDICATED MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
CRNC Communication Context ID	M		9.2.1.18		YES	ignore
Transaction ID	M		9.2.1.62		-	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE <i>Dedicated Measurement Object Type</i>	O			Dedicated Measurement Object Type the measurement was initiated with	YES	ignore
<i>>>RL or of ALL RL</i>					-	
>>RL Information		<i>1..<maxno ofRLs>1..<maxnoofRLs></i>			EACH	ignore
>>>RL ID	M		9.2.1.53		-	
>>>DPCH ID	O		9.2.3.5	TDD only	-	
>>>PUSCH Information		<i>0..<maxno ofPUSCHs></i>		TDD only	EACH	reject
>>>>PUSCH ID	M		9.2.3.12		-	
>>>Dedicated Measurement Value	M		9.2.1.24		-	
>>>CFN	O		9.2.1.7	Dedicated Measurement Time Reference	-	
>>>PUSCH Information		<i>0..<maxno ofPUSCHs></i>		TDD only	GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		-	
<i>>>RLS or of ALL RLS</i>				FDD only	-	
>>RL Set Information		<i>1..<maxno ofRLSets>1..<maxno ofRLSets></i>			-EACH	ignore
>>>RL Set ID	M		9.2.2.39		-	
>>>Dedicated Measurement Value	M		9.2.1.24		-	
>>>CFN	O		9.2.1.7	Dedicated Measurement Time Reference	-	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
$M_{maxnoofRLs}$	Maximum number of individual RL's the measurement can be started on.
$M_{maxnoofPUSCHs}$	Maximum number of PUSCHs per RL a measurement can be started on.
$M_{maxnoofRLSets}$	Maximum number of individual RL Sets a measurement can be started on.

9.1.54 DEDICATED MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18		YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.55 DEDICATED MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE <i>Dedicated Measurement Object Type</i>	M			Dedicated Measurement Object Type the measurement was initiated with	YES	ignore
<i>>>RL or of ALL RL</i>					–	
>>RL Information		<i>1..<maxno ofRLs>1..<maxnoofRLs></i>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>DPCH ID	O		9.2.3.5	TDD only	–	
>>>PUSCH Information		<i>0..<maxno ofPUSCHs></i>		TDD only	EACH	reject
>>>>PUSCH ID	M		9.2.3.12		–	
>>>Dedicated Measurement Value Information	M		9.2.1.24A		–	
>>>PUSCH Information		<i>0..<maxno ofPUSCHs></i>		TDD only	GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		–	
<i>>>RLS or of ALL RLS</i>					–	
>>RL Set Information		<i>1..<maxno ofRLSets>1..<maxno ofRLSets></i>			EACH	ignore
>>>RL Set ID	M		9.2.1.39		–	
>>>Dedicated Measurement Value Information	M		9.2.1.24A		–	

Range Bound	Explanation
<i>M_{maxnoofRLs}</i>	Maximum number of individual RL's the measurement can be started on.
<i>M_{maxnoofPUSCHs}</i>	Maximum number of PUSCHs per RL a measurement can be started on.
<i>M_{maxnoofRLSets}</i>	Maximum number of individual RL Sets a measurement can be started on.

9.1.56 DEDICATED MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBC C" shall be used if this value was used when initiating the measurement. Otherwise, the reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore

9.1.57 DEDICATED MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall be used if the Node B Communication Context ID was set to "All NBCC" when initiating the measurement. Otherwise, the reserved value "All CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore

9.1.58 RADIO LINK FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Reporting Object	M			Object for which the Failure shall be reported.	YES	ignore
>>RL					–	
>>RL Information		1 to <M1..<maxnoofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>>RL Set				FDD only	–	
>>RL Set Information		1 to <M1..<maxnoofRLS ets>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		–	
>>>Cause	M		9.2.1.6		–	
→>>CCTrCH				TDD only	–	
>>RL ID	M		9.2.1.53		–	
>>CCTrCH List		1..<maxno ofCCTrCH s>			EACH	ignore
>>>CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
>>>Cause	M		9.2.1.6		–	

Range Bound	Explanation
MmaxnoofRLs	Maximum number of RLs for one UE.
MmaxnoofRLSets	Maximum number of RL Sets for one UE.
MmaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.1.59 RADIO LINK RESTORE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Reporting Object	M			Object for which the Restoration shall be reported.	YES	ignore
>>RL					–	
>>Radio Link Information		1 to <M1..<maxnoofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>RL Set				FDD only	–	
>>RL Set Information		1 to <M1..<maxnoofRLS ets>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		–	
→>>CCTrCH				TDD only	–	
>>RL ID	M		9.2.1.53		–	
>>CCTrCH List		1 to <M1..<maxnoofCCTrCHs>			EACH	ignore
>>>CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	

Range Bound	Explanation
<i>M</i> maxnoofRLs	Maximum number of RLs for one UE.
<i>M</i> maxnoofRLSets	Maximum number of RL Sets for one UE.
<i>M</i> maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.1.60 COMPRESSED MODE COMMAND [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B eCommunication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Active Pattern Sequence Information	M		9.2.2.A		YES	ignore

9.1.61 ERROR INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	O		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Node B Communication Context ID	O		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Cause	O		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.62 PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
SFN	O		9.2.1.53A		YES	reject
PDSCH Sets to Add		0..<maxno of PDSCH Sets>			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		–	
>PDSCH to Add Information		0..1		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	reject
>>Repetition Period	M		9.2.3.16		–	

>>Repetition Length	M		9.2.3.15		-	
>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>DL Timeslot Information		<i>1..<maxno ofDLts>1..
<maxnoof DLts></i>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift aAnd Burst Type	M		9.2.3.7		-	
>>>TFCI Presence	M		9.2.1.57		-	
>>>DL Code Information		<i>1..<maxno ofPDSCHs >=1..
<maxnoOf PDSCH></i>			-	
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>PDSCH tTo aAdd Information LCR		0..1		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>DL Timeslot Information LCR		<i>1..<maxno ofDLtsLCR >=1..
<Maxnoof DLtsLCR></i>			-GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble sShift LCR	M		9.2.3.7A		-	
>>>TFCI Presence	M		9.2.1.57		-	
>>>DL Code Information LCR		<i>1..<maxno ofPDSCHs >=1..
<maxnoOf PDSCH></i>			-GLOBAL	reject
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
PDSCH Sets tTo Modify		0..<maxno of PDSCHsets>			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		-	
>PDSCH tTo mModify Information		0..1		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD Physical Channel Offset	O		9.2.3.20		-	

>>DL Timeslot Information		<i>0..<maxno ofDLts>0..<maxnoofDLts></i>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift aAnd Burst Type	O		9.2.3.7		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>DL Code Information		<i>0..<maxno ofPDSCHs>0..<maxnoOfPDSCH></i>			-	
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>PDSCH to modify Information LCR		<i>0..10..4</i>		Mandatory for 1.28-Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD Physical Channel Offset	O		9.2.3.20		-	
>>DL Timeslot Information LCR		<i>0..<maxno ofDLtsLCR>0..<MaxnoofDLtsLCR></i>			GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble sShift LCR	O		9.2.3.7A		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>>DL Code Information LCR		<i>0..<maxno ofPDSCHsLCR>0..<maxnoOfPDSCHLCR></i>			GLOBAL	reject
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
PDSCH Sets t o Delete		<i>0..<maxno of PDSCHsets></i>			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		-	
PUSCH Sets t o aAdd		<i>0..<maxno of PUSCHsets></i>			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	
>PUSCH t o aAdd Information		<i>0..1</i>		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD Physical Channel Offset	M		9.2.3.20		-	

>>UL Timeslot Information		<i>1..<maxno ofULts>1..</i> <i><maxnoof ULts></i>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift <i>a</i> And Burst Type	M		9.2.3.7		-	
>>>TFCI Presence	M		9.2.1.57		-	
>>>UL Code Information		<i>1..<maxno ofPUSCHs</i> <i>≥1..</i> <i><maxnoOf PUSCH></i>			-	
>>>>PUSCH ID	M		9.2.3.12		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>PUSCH <i>t</i> To <i>a</i> Add Information LCR	⊖	<i>0..1+</i>		Applicable to For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>UL Timeslot Information LCR		<i>1..<maxno ofULtsLCR</i> <i>≥1..</i> <i><Maxnoof ULtsLCR></i>			GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble <i>s</i> Shift LCR	M		9.2.3.7A		GLOBAL	
>>>TFCI Presence	M		9.2.1.57		-	
>>>>UL Code Information LCR		<i>1..<maxno ofPUSCHs LCR</i> <i>≥1..</i> <i><maxnoOf PUSCHLC R></i>			GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
PUSCH Sets <i>t</i> To Modify		<i>0..<maxno of PUSCHSe ts></i>			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	
>PUSCH <i>t</i> To <i>m</i> Modify Information		<i>0..1</i>		Applicable to For 3.84Mcps TDD only	YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD Physical Channel Offset	O		9.2.3.20		-	
>>UL Timeslot Information		<i>0..<maxno ofULts>0..</i> <i><maxnoof ULts></i>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift <i>a</i> And Burst Type	O		9.2.3.7		-	
>>>TFCI Presence	O		9.2.1.57		-	

>>>UL Code Information		<i>0..<maxno of PUSCHs> ≥ 0 .. <maxnoOf PDSCH></i>			-	
>>>>PUSCH ID	M		9.2.3.12		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>PUSCH to modify Information LCR		<i>0..10..4</i>		Applicable to For 1.28Mcps TDD only	YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD Physical Channel Offset	O		9.2.3.20		-	
>>UL Timeslot Information LCR		<i>0..<maxno of ULtsLCR> ≥ 0 .. <Maxnoof ULtsLCR></i>		Applicable to For 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble s Shift LCR	O		9.2.3.7A		GLOBAL	
>>>TFCI Presence	O		9.2.1.57		-	
>>>UL Code Information LCR		<i>0..<maxno of PUSCHs LCR> ≥ 0 .. <maxnoOf PDSCHLCR></i>			GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
PUSCH Sets to Delete		<i>0..<maxno of PUSCHsets></i>			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		GLOBAL	

Range b Bound	Explanation
<i>Mmaxnoof-PDSCH-Sets</i>	Maximum number of PDSCH Sets in a cell.
<i>Mmaxnoof-PDSCHs</i>	Maximum number of PDSCHs in a cell for 3.84Mcps TDD only.
<i>maxnoofPDSCHsLCRMaxnoOfPDSCHLCR</i>	Maximum number of PDSCHs in a cell for 1.28Mcps TDD only.
<i>Mmaxnoof-PUSCH-Sets</i>	Maximum number of PUSCH Sets in a cell.
<i>Mmaxnoof-PUSCHs</i>	Maximum number of PUSCHs in a cell for 3.84Mcps TDD.
<i>maxnoofPUSCHsLCRMaxnoof PUSCHLCR</i>	Maximum number of PUSCHs in a cell for 1.28Mcps TDD.
<i>MmaxnoofDLts</i>	Maximum number of Downlink time slots in a cell for 3.84Mcps TDD.
<i>maxnoofDLtsLCR</i>	Maximum number of Downlink time slots in a cell for 1.28Mcps TDD.
<i>MmaxnoofULts</i>	Maximum number of Uplink time slots in a cell for 3.84Mcps TDD.
<i>maxnoofULtsLCRMaxnoofULtsLCR</i>	Maximum number of Uplink time slots in a cell for 1.28Mcps TDD.

9.1.63 PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		==	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		==	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.64 PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		==	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		==	
CHOICE <i>cCause</i> <i>iLevel</i>	M				YES	ignore
>General					-	
>>Cause	M		9.2.1.6		-	
>>Set <i>sSpecific</i>					-	
>>Unsuccessful DL Shared Channel Set>>Unsuccessful-DL Shared-channel set		<i>0..<maxno ofPDSCH Sets>0..<maxnoofP DSCHSets ></i>			EACH	ignore
>>>PDSCH Set ID	M		9.2.3.13		==	
>>>Cause	M		9.2.1.6		YES	ignore
>>Unsuccessful UL Shared Channel Set>>Unsuccessful-UL Shared-channel set		<i>0..<maxno ofPUSCH Sets>0..<maxnoofP USCHSets ></i>			EACH	ignore
>>>PUSCH Set ID	M		9.2.3.13		==	
>>>Cause	M		9.2.1.6		==	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range <i>bBound</i>	Explanation
<i>Mmaxnoof-PDSCH-Sets</i>	Maximum number of PDSCH Sets in a cell.
<i>Mmaxnoof-PUSCH-Sets</i>	Maximum number of PUSCH Sets in a cell.

9.1.65 RESET REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	

CHOICE <i>Reset Indicator</i>	M				YES	ignore
<i>>>Communication Context</i>					–	
>>>>Communication Context Information		1..<maxCommunicationContext>			EACH	reject
>>>CHOICE <i>Communication Context Type</i>	M				–	
>>>>CRNC <i>Communication Context</i>					–	
>>>>>CRNC <i>Communication Context ID</i>	M		9.2.1.18		–	
>>>>Node B <i>Communication Context</i>					–	
>>>>>Node B <i>Communication Context-ID</i>	M		9.2.1.48		–	
<i>>>Communication Control Port</i>					–	
>>>>Communication Control Port Information		1..<maxCCPinNodeB>			EACH	reject
>>>Communication <i>Control Port ID</i>	M		9.2.1.15		–	
<i>>>Node B</i>			NULL		–	

Range b Bound	Explanation
<i>maxCommunicationContext</i>	Maximum number of e Communication e Contexts that can exist in the Node-B
<i>maxCCPinNodeB</i>	Maximum number of e Communication e Control p Ports that can exist in the Node B

9.1.66 RESET RESPONSE

IE/Group Name	Presence	Range	IE t Type and r Reference	Semantics d Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.67 DL POWER TIMESLOT CONTROL REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
DL Time Slot ISCP Info	O		9.2.3.4F	Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD only.	YES	ignore
DL Time Slot ISCP Info LCR	O		9.2.3.40A	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD only.	YES	ignore

9.1.68 RADIO LINK PREEMPTION REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18		YES	ignore
RL Information		0..<maxno ofRLs>			EACH	ignore
>RL ID	M		9.2.1.53		–	

Range Bound	Explanation
maxno ofRLs	Maximum number of radio links for one UE

9.1.69 INFORMATION EXCHANGE INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Information Exchange ID	M		9.2.1.36C		YES	reject
Information Exchange Object Type	M		9.2.1.36A		YES	reject
CHOICE Information Exchange Object Type	M				YES	reject
>>Cell					–	
>>C-ID	M		9.2.1.9		–	
Information Type	M		9.2.1.36D		YES	reject
Information Report Characteristics	M		9.2.1.36B		YES	reject

9.1.70 INFORMATION EXCHANGE INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Information Exchange ID	M		9.2.1.36C		YES	ignore
CHOICE <i>Information Exchange Object Type</i>	O				YES	ignore
<i>->>Cell</i>					–	
<i>>>Requested Data Value</i>	M		9.2.1.51A		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.71 INFORMATION EXCHANGE INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Information Exchange ID	M		9.2.1.36C		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.72 INFORMATION REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Information Exchange ID	M		9.2.1.36C		YES	ignore
CHOICE <i>Information Exchange Object Type</i>	M				YES	ignore
<i>->>Cell</i>					–	
<i>->>Requested Data Value Information</i>	M		9.2.1.51B		–	

9.1.73 INFORMATION EXCHANGE TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Information Exchange ID	M		9.2.1.36C		YES	ignore

9.1.74 INFORMATION EXCHANGE FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Information Exchange ID	M		9.2.1.36C		YES	ignore
Cause	M		9.2.1.6		YES	ignore

9.1.75 CELL SYNCHRONISATION INITIATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Cell Sync Burst Repetition Period	M		9.2.3.4J		YES	reject
Time Slot Information		<u>1..151..15</u>			GLOBAL	reject
>Time Slot	M		9.2.3.23		–	
Cell Sync Burst Transmission Initiation Information		<u>0..10..1</u>			GLOBAL	reject
>CSB Transmission ID	M		9.2.3.4N			
>SFN	M		9.2.1.53A		–	
>Cell Sync Burst Code	M		9.2.3.4G		–	
>Cell Sync Burst Code Shift	M		9.2.3.4H			
>Initial DL Transmission Power	M		DL Power 9.2.1.21		–	
Cell Sync Burst Measurement Initiation Information		<u>0..10..1</u>			GLOBAL	reject
>CSB Measurement ID	M		9.2.3.4I			
>Cell Sync Burst Code	M		9.2.3.4G		–	
>Cell Sync Burst Code Shift	M		9.2.3.4H			
>Synchronisation Report Type	M		9.2.3.18 ^E		–	
>SFN	O		9.2.1.53A		–	
>Synchronisation Report Characteristics	M		9.2.3.18D		–	

9.1.76 CELL SYNCHRONISATION INITIATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.77 CELL SYNCHRONISATION INITIATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.78 CELL SYNCHRONISATION RECONFIGURATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Time Slot	M		9.2.3.23		YES	reject
Number of Cycles per SFN Period	M		9.2.3.7B		YES	reject
Number of Repetitions per Cycle Period	M		9.2.3.7C		YES	reject
Cell Sync Burst Transmission Reconfiguration Information		<i>0..<maxnofCellSyncBursts>0..<maxnofCellSyncBursts></i>			Global	reject
>CSB Transmission ID	M		9.2.3.4N		–	
>Sync Frame Number to Transmit	M		Sync Frame Number 9.2.3.18C		–	
>Cell Sync Burst Code	O		9.2.3.4G		–	
>Cell Sync Burst Code Shift	O		9.2.3.4H		–	
>DL Transmission Power	O		DL Power 9.2.1.21		–	
Cell Sync Burst Measurement Reconfiguration Information		<i>0..10..4</i>			YES	reject
>Cell Sync Burst Measurement Information		<i>1..<maxnofCellSyncBursts>4..<maxnofCellSyncBursts></i>			GLOBAL	reject
>>Sync Frame Number to Receive	M		Sync Frame Number 9.2.3.18C		–	
>>Cell Sync Burst Information		<i>1..<maxnofreceptionsperSyncFrame>1..<maxnofreceptionsperSyncFrame></i>			–	
>>>CSB Measurement ID	M		9.2.3.4I		–	
>>>Cell Sync Burst Code	M		9.2.3.4G		–	
>>>Cell Sync Burst Code shift	M		9.2.3.4H		–	
>Synchronisation Report Type	O		9.2.3.18E		YES	reject
>Synchronisation Report	O		9.2.3.18D		YES	reject

Characteristics						
Range	Bound	Explanation				
<i>maxnoofCellSyncBursts</i>	<i>maxnoofCellSyncBursts</i>	Maximum number of cell sync bursts per cycle				
<i>maxnoofreceptionsperSyncFrame</i>	<i>maxnoofreceptionsperSyncFrame</i>	Maximum number of cell sync burst receptions per Sync Frame				

9.1.79 CELL SYNCHRONISATION RECONFIGURATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.80 CELL SYNCHRONISATION RECONFIGURATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.81 CELL SYNCHRONISATION REPORT [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Cell Synchronisation Information		<i>1..<maxCellInNodeB></i> <i><maxCellInNodeB></i>			EACH	ignore
>C-ID	M		9.2.1.9		YES	ignore
>CHOICE <i>Synchronisation Report Type</i>					YES	ignore
<i>>>>>Initial Phase or of Steady-State Phase</i>					–	
>>>>Cell Sync Burst Measured Information		<i>1..<maxnoofCellSyncBursts></i> <i><maxnoofCellSyncBursts></i>			–	
>>>>SFN	M		9.2.1.53A		–	
>>>>Cell Sync Burst Information		<i>1..<maxnoofreceptionsperSyncFrame></i> <i><maxnoofreceptionsperSyncFrame></i>			–	

		receptions per Sync Frame				
>>>>CHOICE Cell Sync Burst Availability Indicator	M				-	
>>>>>Cell Sync Burst Available					-	
>>>>>>Cell Sync Burst Timing	M		9.2.3.4L		-	
>>>>>>Cell Sync Burst SIR	M		9.2.3.4K		-	
>>>>>>Cell Sync Burst #Not Available			NULL		-	
>>>>Late-Entrant Cell			NULL		-	
>>>>Frequency Acquisition			NULL		-	

Range Bound	Explanation
maxCellInNodeBmaxCellInNodeB	Maximum number of Cells in a Node B
maxnoofCellSyncBurstsmaxnoofCellSyncBursts	Maximum number of cell synchronisation bursts per cycle
maxnoofreceptionsperSyncFramemaxnoofreceptionsperSyncFrame	Maximum number of cell synchronisation burst receptions per Sync Frame

9.1.82 CELL SYNCHRONISATION TERMINATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		-	
C-ID	M		9.2.1.9		YES	ignore
CSB Transmission ID	O		9.2.3.4N		YES	ignore
CSB Measurement ID	O		9.2.3.4I		YES	ignore

9.1.83 CELL SYNCHRONISATION FAILURE INDICATION [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		-	
C-ID	M		9.2.1.9		YES	ignore
CSB Transmission ID	O		9.2.3.4N		YES	ignore
CSB Measurement ID	O		9.2.3.4I		YES	ignore
Cause	M		9.2.1.6		YES	ignore

9.1.84 CELL SYNCHRONISATION ADJUSTMENT REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	

Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Cell Adjustment Information		<i>1..<maxCells in NodeB> 1.. <maxCells in NodeB></i>			EACH	ignore
>C-ID	M		9.2.1.9		–	
>Frame Adjustment <i>v</i> Value	O		9.2.3.5C		–	
>Timing Adjustment <i>v</i> Value	O		9.2.3.22a		–	
>DL Transmission Power	O		9.2.1.21		–	
>SFN	O		9.2.1.53A		–	

Range <i>b</i> Bound	Explanation
<i>maxCells in NodeB</i> MaxCells in NodeB	Maximum number of Cells in a Node B

9.1.85 CELL SYNCHRONISATION ADJUSTMENT RESPONSE [TDD]

IE/Group Name	Presence	Range	IE <i>t</i> Type and <i>r</i> Reference	Semantics <i>d</i> Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.86 CELL SYNCHRONISATION ADJUSTMENT FAILURE [TDD]

IE/Group Name	Presence	Range	IE <i>t</i> Type and <i>r</i> Reference	Semantics <i>d</i> Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE <i>e</i> Cause <i>l</i> Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		–	
>Cell <i>s</i> Specific					–	
>>Unsuccessful Cell Information Response		<i>1..<maxCells in NodeB> 1.. <maxCells in NodeB></i>			EACH	ignore
>>>C-ID	M		9.2.1.9		–	
>>>Cause	M		9.2.1.6		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range <i>b</i> Bound	Explanation
<i>maxCells in NodeB</i> MaxCells in NodeB	Maximum number of Cells in a Node B

9.2 Information Element Functional Definition and Contents

9.2.0 General

Subclause 9.2 presents the NBAP IE definitions in tabular format. The corresponding ASN.1 definition is presented in Subclause 9.3. In case there is a contradiction between the tabular format in Subclause 9.2 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, where the tabular format shall take precedence.

When specifying information elements which are to be represented by bitstrings, if not otherwise specifically stated in the semantics description of the concerned IE or elsewhere, the following principle applies with regards to the ordering of bits:

- The first bit (leftmost bit) contains the most significant bit (MSB);
- The last bit (rightmost bit) contains the least significant bit (LSB);
- When importing bitstrings from other specifications, the first bit of the bitstring contains the first bit of the concerned information;

9.2.1 Common parameters

9.2.1.1 Add/Delete Indicator

The add/delete indicator shall notify the CRNC whether the associated resource has been added to or removed from the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Add/Delete Indicator			ENUMERATED_(Add, Delete)	

9.2.1.1A Allocation/Retention Priority

This parameter indicates the priority level in the allocation and retention of Node B internal resources. See Annex A.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Priority Level	M		INTEGER (spare (0), highest (1), ..., lowest (14), no priority (15)) (0..15)	This IE indicates the priority of the request. Usage: Value "0" means "Spare": It shall be treated as a logical error if received. Values between "1" and "14" are ordered in decreasing order of priority, "1" being the highest and "14" the lowest. Value "15" means "No Priority". Value "0" shall be treated as a logical error if received.
Pre-emption Capability	M		ENUMERATED_ (shall not trigger pre-emption, may trigger pre-emption)	
Pre-emption Vulnerability	M		ENUMERATED (not pre-emptable, pre-emptable)	

9.2.1.2 Availability Status

The availability status is used to indicate more detailed information of the availability of the resource. In accordance with ref. [6], following values are defined. If the value of this attribute is an empty set, this implies that none of the status conditions described in ref. [6] are present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Availability Status			ENUMERATED (empty, in test, failed, power off, off line, off duty, dependency, degraded, not installed, log full, ...)	

9.2.1.3 BCCH Modification Time

Indicates the time after which the new system information shall be applied on BCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
BCCH Modification Time			INTEGER Integer (0..511)	All SFN values in which MIB may be mapped are allowed. The tabular description is presented in [18].

9.2.1.4 Binding ID

The Binding ID is the identifier of a user data stream. It is allocated at the Node B and it is unique for each transport bearer under establishment to/from the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Binding ID			OCTET STRING Octetstring (1..4,...)	

9.2.1.5 Blocking Priority Indicator

The Blocking priority indicator shall indicate the immediacy with which a resource should be blocked from use. The following priority classes shall be supported in the Blocking priority indicator.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Blocking Priority Indicator			ENUMERATED_ High, Normal, Low, ...)	"High" priority: Block resource immediately. "Normal" priority: Block resource when idle or upon timer expiry. "Low" priority: Block resource when idle.

9.2.1.5A Burst mode parameters

The *Burst mode parameters* IE provides information to be applied for IPDL burst mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
Burst Start	M		INTEGER (0..15)	See [10] and [21]
Burst Length	M		INTEGER (10..25)	See [10] and [21]
Burst Freq	M		INTEGER (1..16)	See [10] and [21]

9.2.1.6 Cause

IE/Group Name	Presence	Range	IE #Type and #Reference	Semantics #Description
CHOICE Cause Group				
>Radio Network Layer				
>>Radio Network Layer Cause	M		EnumeratedENUMERATED (unknown C-ID, Cell not available, Power level not supported, DL radio resources not available, UL radio resources not available, RL Already Activated/allocated, Node B Resources Unavailable, Measurement not supported for the object, Combining Resources not available, Requested configuration not supported, Synchronization failure, Priority transport channel established, SIB Origination in Node B not Supported, Requested Tx Diversity Mode not supported, Unspecified, BCCH scheduling error, Measurement Temporarily not Available, Invalid CM Setting, Reconfiguration CFN not elapsed, Number of DL codes not supported, S-CPICH not supported, Combining not supported, UL SF not supported, DL SF not supported, Common Transport Channel Type not supported, Dedicated Transport Channel Type not supported, Downlink Shared Channel Type not supported, Uplink Shared Channel Type not supported, CM not supported, Tx diversity no longer supported, Unknown Local Cell ID, ..., Number of UL codes not supported, Information temporarily not available, Information Provision not supported for the object, Cell Synchronisation not supported, Cell Synchronisation Adjustment not supported, DPC Mode Change not Supported,	

			IPDL already activated, IPDL not supported, IPDL parameters not available, Frequency Acquisition not supported)	
>Transport Layer				
>>Transport Layer Cause	M		EnumeratedENUMERATED (Transport resource unavailable, Unspecified, ...)	
>Protocol				
>>Protocol Cause			EnumeratedENUMERATED (Transfer syntax error, Abstract syntax error (reject), Abstract syntax error (ignore and notify), Message not compatible with receiver state, Semantic error, Unspecified, Abstract syntax error (falsely constructed message), ...)	
>Misc				
>>Miscellaneous Cause	M		EnumeratedENUMERATED (Control processing overload Hardware failure, O&M intervention, Not enough user plane processing resources, Unspecified, ...)	

The meaning of the different cause values is described in the following table. In general, "not supported" cause values indicate that the concernedconcerning capability is missing. On the other hand, "not available" cause values indicate that the concernedconcerning capability is present, but insufficient resources were available to perform the requested action.

Radio Network Layer cause	Meaning
BCCH scheduling error	The Node B has detected an illegal BCCH schedule update (see subclause 8.2.16.3).
Cell not Available;	The <u>concernedconcerning</u> cell or local cell is not available.
<u>Cell Synchronisation Adjustment not supported</u>	<u>The concerned cell(s) do not support Cell Synchronisation Adjustment.</u>
Cell Synchronisation not supported	The <u>concernedconcerning</u> cell(s) do not support Cell Synchronisation.
Combining not supported	The Node B does not support RL combining for the <u>concernedconcerning</u> cells.
Combining Resources Not Available	The value of the received <i>Diversity Control Field</i> IE was set to "Must", but the Node B cannot perform the requested combining.
CM not supported	The <u>concerningconcerned</u> cell(s) do not support Compressed Mode.
Common Transport Channel Type not supported	The <u>concerningconcerned</u> cell(s) do not support the RACH and/or FACH and/or CPCH Common Transport Channel Type.
Dedicated Transport Channel Type not supported	The <u>concerningconcerned</u> cell(s) do not support the Dedicated Transport Channel Type.
DL Radio Resources not Available	The Node B does not have sufficient DL radio resources available.
DL SF not supported	The <u>concerningconcerned</u> cell(s) do not support the requested DL SF.
DL Shared Channel Type not supported	The <u>concerningconcerned</u> cell(s) do not support the Downlink Shared Channel Type.
DPC Mode Change not Supported	The <u>concerningconcerned</u> cells do not support DPC mode changes.
Frequency Acquisition not supported	The <u>concerningconcerned</u> cell(s) do not support Frequency Acquisition.
Information Provision not supported for the object	The requested information provision is not supported for the concerned object types.

Information temporarily not available	The requested information can temporarily not be provided.
Invalid CM Settings	The <u>concerning</u> cell(s) consider the requested Compressed Mode settings invalid.
IPDL already activated	The <u>concerning</u> cell(s) have already active IPDL ongoing.
IPDL not supported	The <u>concerning</u> cell(s) do not support the IPDL.
IPDL parameters not available	The <u>concerning</u> cell(s) do not have IPDL parameters defining IPDL to be applied.
Measurement not Supported For The Object	At least one of the <u>concerning</u> cell(s) does not support the requested measurement on the <u>concerning</u> object type.
Measurement Temporarily not Available	The Node B can temporarily not provide the requested measurement value.
Node B resources unavailable	The Node B does not have sufficient resources available.
Number of DL codes not supported	The <u>concerning</u> cell(s) do not support the requested number of DL codes.
Number of UL codes not supported	The <u>concerning</u> cell(s) do not support the requested number of UL codes.
Power Level not Supported	A DL power level was requested which the <u>concerning</u> cell(s) do not support.
Priority transport channel established	The CRNC cannot perform the requested blocking since a transport channel with a high priority is present.
Reconfiguration CFN not elapsed	The requested action cannot be performed due to that a <u>RADIO LINK RECONFIGURATION COMMIT</u> message was received previously, but the <u>concerning</u> CFN has not yet elapsed.
Requested Configuration not Supported	The <u>concerning</u> cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters.
Requested Tx Diversity mode not supported	The <u>concerning</u> cell(s) do not support the requested transmit diversity mode.
RL already Activated/ allocated	The Node B has already allocated an RL with the requested RL-id for this UE context.
S-CPICH not supported	The <u>concerning</u> cell(s) do not support S-CPICH.
SIB Origination in Node B not Supported	The Node B does not support the origination of the requested SIB for the <u>concerning</u> cell.
Synchronisation Failure	Loss of UL Uu synchronisation.
<u>Cell Synchronisation Adjustment not supported</u>	<u>The concerning cell(s) do not support Cell Synchronisation Adjustment</u>
Tx diversity no longer supported	Tx diversity can no longer be supported in the <u>concerning</u> cell.
UL Radio Resources not Available	The Node B does not have sufficient UL radio resources available.
UL SF not supported	The <u>concerning</u> cell(s) do not support the requested minimum UL SF.
UL Shared Channel Type not supported	The <u>concerning</u> cell(s) do not support the Uplink Shared Channel Type.
Unknown C-ID	The Node B is not aware of a cell with the provided C-ID.
Unknown Local Cell ID	The Node B is not aware of a local cell with the provided Local Cell ID.
Unspecified	Sent when none of the above cause values applies but still the cause is Radio Network layer related.

Transport Network Layer cause	Meaning
Transport resource unavailable	The required transport resources are not available.
Unspecified	Sent when none of the above cause values applies but still the cause is Transport Network layer related.

Protocol cause	Meaning
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Abstract Syntax Error (Reject)	The received message included an abstract syntax error and the concerning criticality indicated "reject" (see subclause 10.3).
Abstract Syntax Error (Ignore and Notify)	The received message included an abstract syntax error and the concerning criticality indicated "ignore and notify" (see subclause 10.3).
Abstract syntax error (falsely constructed message)	The received message contained IEs in wrong order or with too many occurrences (see subclause 10.3).
Message not Compatible with Receiver State	The received message was not compatible with the receiver state (see subclause 10.4).
Semantic Error	The received message included a semantic error (see subclause 10.4).
Transfer Syntax Error	The received message included a transfer syntax error (see subclause 10.2).
Unspecified	Sent when none of the above cause values applies but still the cause is protocol related.

Miscellaneous cause	Meaning
Control Processing Overload	Node B control processing overload.
Hardware Failure	Node B hardware failure.
Not enough User Plane Processing Resources	Node B has insufficient user plane processing resources available.
O&M Intervention	Operation and Maintenance intervention related to Node B equipment.
Unspecified	Sent when none of the above cause values applies and the cause is not related to any of the categories Radio Network Layer, Transport Network Layer or Protocol.

9.2.1.7 CFN

Connection Frame Number for the radio connection, see ref. [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CFN			INTEGER Integer (0..255)	

9.2.1.8 CFN Offset

Void

9.2.1.9 C-ID

The C-ID (Cell identifier) is the identifier of a cell in one RNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
C-ID			INTEGER (0..65535)	

9.2.1.9A Common Channels Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the allocated Spreading Factor. [FDD - For the PRACH, the reference spreading factor shall be the minimum possible spreading factor amongst the ones defined by the *RACH Slot Format 'RACH slot format'* IE(s) in the Common Transport Channel Setup or Reconfiguration procedures. For the PCPCH, the reference spreading factor shall be the minimum spreading factor computed from the TFCS as described in [8].]

This capacity consumption law indicates the consumption law to be used with the following procedures:-

- Common Transport Channel Setup
- Common Transport Channel Deletion
- [FDD - Common Transport Channel Reconfiguration]

For the Common Transport Channel Setup procedure, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall be credited to the Capacity Credit for the Common Transport Channel Deletion one.

[FDD - For the Common Transport Channel Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited if this difference is negative).]

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the "DL cost" shall be applied to the "DL or Global Capacity Credit" and the "UL Cost" shall be applied to the "UL Capacity Credit". If it is modelled as shared resources, both the "DL cost" and the "UL cost" shall be applied to the "DL or Global Capacity Credit".

[FDD - When the Common Transport Channel Setup, Deletion or Reconfiguration procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH, AICH, PCPCH, CD/CA-ICH and AP-AICH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

[FDD - The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by a physical channel, the cost credited to or debited from the Capacity Credit for this physical channel shall be taken as N times the cost given in the consumption law, where N is the number of channelization codes.]

[TDD - When the Common Transport Channel Setup, or Deletion procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
<u>SF Allocation Law</u> SF allocation law		$1..<max\ no\ of\ SFs><M\ ax\ Number\ Of\ SF>$		[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD – For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL cost	M		INTEGER (0..65535)	
>UL cost	M		INTEGER (0..65535)	

Range Bound	Explanation
$M_{max\ Number\ Of\ SFs}$	Maximum number of Spreading Factors

9.2.1.9B Common Measurement Accuracy

The Common Measurement Accuracy ~~Common Measurement Accuracy~~ IE indicates the accuracy of the common measurement.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
CHOICE <i>Common Measurement Accuracy</i>				
$\rightarrow \geq T_{UTRAN-GPS}$ <i>Measurement Accuracy Class</i>				
$\gg T_{UTRAN-GPS}$ <i>Measurement Accuracy Class</i>	M		$T_{UTRAN-GPS}$ Accuracy Class 9.2.1.64C	

9.2.1.10 Common Measurement Object Type

The Common Measurement Object type indicates the type of object that the measurement is to be performed on.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Measurement Object Type			ENUMERATED (CELL, RACH, CPCH,...)	

Void.

9.2.1.11 Common Measurement Type

The Common Measurement Type identifies which measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Measurement Type			ENUMERATED (Received t_{Total} w_{Wide} b_{Band} p_{Power} , Transmitted Carrier Power, Acknowledged PRACH $p_{Preambles}$, UL Timeslot ISCP, Acknowledged PCPCH Access Preambles, Detected PCPCH Access Preambles, ..., UTRAN GPS Timing of Cell Frames for LCSUE Positioning, SFN-SFN Observed Time Difference)	"UL Timeslot ISCP" is used by TDD only, "Acknowledged PRACH $p_{Preambles}$ ", "Acknowledged PCPCH Access Preambles", "Detected PCPCH Access Preambles" are used by FDD only

9.2.1.12 Common Measurement Value

The Common Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE <i>Common Measurement Value</i>					■	
->>Transmitted Carrier Power					■	
>>Transmitted Carrier Power Value	M		INTEGER (0..100)	According to mapping in [22] and [23]	■	
->>Received Total Wide Band Power					■	
>>Received Total Wide Band Power Value	M		INTEGER (0..621)	According to mapping in [22] and [23]	■	
->>Acknowledged PRACH Preambles				FDD Only	■	
>>Acknowledged PRACH Preamble Value	M		INTEGER (0..240,...)	According to mapping in [22]	■	
->>UL Timeslot ISCP				TDD Only	■	
>>UL Timeslot ISCP	M		INTEGER (0..127)	According to mapping in [23]	■	
->>Acknowledged PCPCH Access Preambles				FDD Only	■	
>>Acknowledged PCPCH Access Preambles	M		INTEGER (0..15,...)	According to mapping in [22]	■	
->>Detected PCPCH Access Preambles				FDD Only	■	
>>Detected PCPCH Access Preambles	M		INTEGER (0..240,...)	According to mapping in [22]	■	
>>Additional Common Measurement Values					■	
>>UTRAN GPS Timing of Cell Frames for LCSUE Positioning					■	
>>>T _{UTRAN-GPS} Measurement Value Information	M		9.2.1.64A		YES	ignore
->>>SFN-SFN Observed Time Difference					■	
>>>SFN-SFN Measurement Value Information	M		9.2.1.53E		YES	ignore

9.2.1.12A Common Measurement Value Information

The *Common Measurement Value Information* IE provides information both on whether or not the Common Measurement Value is provided in the message or not and if provided also the Common Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Measurement Availability Indicator</i>	M			
>>>Measurement Available				
>>Common Measurement Value	M		9.2.1.12	
>>>Measurement <i>n</i> Not Available			NULL	

9.2.1.13 Common Physical Channel ID

Common Physical Channel ID is the unique identifier for one common physical channel within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID			Integer INTEGER (0..255)	

9.2.1.13A Common Physical Channel Status Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID	M		9.2.1.13	
Resource Operational State	M		9.2.1.52	
Availability Status	M		9.2.1.2	

9.2.1.14 Common Transport Channel ID

Common Transport Channel ID is the unique identifier for one common transport channel within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID			Integer INTEGER (0..255)	

9.2.1.14A Common Transport Channel Information Response

The *Common Transport Channel Information Response* IE provides information for Common Transport Channels that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID	M		9.2.1.14	
Binding ID	O		9.2.1.4	
Transport Layer Address	O		9.2.1.63	

9.2.1.14B Common Transport Channel Status Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID	M		9.2.1.14	
Resource Operational State	M		9.2.1.52	
Availability Status	M		9.2.1.2	

9.2.1.15 Communication Control Port ID

A Communication Control Port corresponds to one signalling bearer between the CRNC and the Node B for the control of Node B Communication Contexts. The Node B may have multiple Communication Control Ports (one per Traffic Termination Point). The Communication Control Port is selected at creation of the Node B Communication Context. The Communication Control Port ID is the identifier of the Communication Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Communication Control Port ID			INTEGER (0..65535)	

9.2.1.16 Configuration Generation ID

The Configuration Generation ID describes the generation of the configuration of logical resources in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Configuration Generation ID			INTEGER (0..255)	Value "0" means "No configuration". At possible wraparound of the ID counter in CRNC the value "0" shall not be used.

9.2.1.17 Criticality Diagnostics

The *Criticality Diagnostics* IE is sent by a Node B or the CRNC when parts of a received message have not been comprehended or are missing, or if the message contained logical errors. When applicable, it contains information about which IEs that were not comprehended or were missing.

For further details on how to use the *Criticality Diagnostics* IE, see Annex C.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Procedure ID		0..10..1		Procedure ID is to be used if Criticality Diagnostics is part of Error Indication procedure, and not within the response message of the same procedure that caused the error	■	
>Procedure Code	M		INTEGER (0..255)		■	
>Ddmode	M		ENUMERATED (FDD, TDD, FDD, Common, ...)	"Common" = common to FDD and TDD.	■	
Triggering Message	O		ENUMERATED_(initiating message, successful outcome, unsuccessful outcome, outcome)	The Triggering Message is used only if the Criticality Diagnostics is part of Error Indication.	■	
Procedure Criticality	O		ENUMERATED_(reject, ignore, notify)	This Procedure Criticality is used for reporting the Criticality of the Triggering message (Procedure).	■	
Transaction ID	O		Transaction ID 9.2.1.62		■	
Information Element Criticality Diagnostics		0..<max no of errors>			■	
>IE Criticality	M		ENUMERATED_(reject, ignore, notify)	The IE Criticality is used for reporting the criticality of the triggering IE. The value "ignore" shall never be used.	■	
>IE ID	M		INTEGER (0..65535)	The IE ID of the not understood or missing IE	■	
>Repetition Number	O		INTEGER (0..255)	The Repetition Number IE gives: <ul style="list-style-type: none"> in case of a not understood IE: The number of occurrences of the reported IE up to and including the not understood occurrence in case of a missing IE: The number of occurrences up to but not including the missing occurrence. 	■	

				Note: All the counted occurrences of the reported IE must have the same topdown hierachical message structure of IEs with assigned criticality above them.		
>Message Structure	O		9.2.1.45A	The <i>Message Structure</i> IE describes the structure where the not understood or missing IE was detected. This IE is included if the not understood IE is not the top level of the message.	YES	ignore
>Type eOf Error	M		ENUMERATED_(not understood, missing, ...)		YES	ignore

Range bBound	Explanation
Mmaxnooferrors	Maximum ne-number of IE errors allowed to be reported with a single message.

9.2.1.18 CRNC Communication Context ID

The CRNC Communication Context ID is the identifier of the Communication Context in the CRNC.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
CRNC Communication Context ID			INTEGER (0..2^20 - 1)	"2^20-1" is a reserved value to indicateing all the CRNC eCommunication eContexts that can be reached by the eCommunication eControl pPort (All CRNCCC).

9.2.1.18A CTFC

The CTFC is an integer number calculated in accordance with [18], subclause 14.10. Regarding the channel ordering, for all transport channels, 'TrCH1' corresponds to the transport channel having the lowest transport channel identity among all configured transport channels on this CCTrCH. 'TrCH2' corresponds to the transport channel having the next lowest transport channel identity, and so on.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE CTFC Format				
>2 bits long				
>>CTFC value	M		INTEGER (0..3)	
>4 bits long				
>>CTFC value	M		INTEGER (0..15)	
>6 bits long				
>>CTFC value	M		INTEGER (0..63)	
>8 bits long				
>>CTFC value	M		INTEGER (0..255)	
>12 bits long				
>>CTFC value	M		INTEGER (0..4095)	
>16 bits long				
>>CTFC value	M		INTEGER (0..65535)	
>max nb bits long				
>>CTFC value	M		INTEGER (0..maxCTFC)	

Range Bound	Explanation
MaxCTFC	Maximum number of the CTFC value is calculated according to the following: $\sum_{i=1}^I (L_i - 1)P_i$ with the notation according to ref. [18]

9.2.1.19 DCH Combination Indicator

Void

9.2.1.20 DCH ID

The DCH ID is the identifier of an active dedicated transport channel. It is unique for each active DCH among the active DCHs simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCH ID			INTEGER (0..255)	

9.2.1.20A Dedicated Channels Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the [FDD - allocated Spreading Factor and the RL/RLS situation] [TDD – allocated Spreading Factor on each DPCH and the assigned timeslot]. [FDD - In uplink, the reference spreading factor shall be the minimum spreading factor signalled in the Radio Link Setup Request message (*Min UL Channelisation Code Length* IE).]

This capacity consumption law indicates the consumption law to be used with the following procedures :

- Radio Link Setup
- Radio Link Addition
- Radio Link Reconfiguration
- Radio Link Deletion
- [TDD - Physical Shared Channel Reconfiguration]

For the Radio Link Setup and Radio Link Addition procedures, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall be credited to the Capacity Credit for the Radio Link Deletion procedure. For the Radio Link Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited when this difference is negative).

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the DL cost shall be applied to the DL or Global Capacity Credit and the UL Cost shall be applied to the UL Capacity Credit. If it is modelled as shared resources, both the DL costs and the UL costs shall be applied to the DL or Global Capacity Credit.

[FDD - For a Radio Link creating a Radio Link Set (first RL of a RLS), the cost for the RL (cost 2) and RLS (cost 1) shall be taken into account. When adding a Radio Link to a Radio Link Set, only the RL cost (cost 2) shall be taken into account.

In the case of where multiple Radio Links are established in one procedure, for every created Radio Link Set, the first Radio Link is always the Radio Link with the lowest repetition number.]

[FDD- When a PDSCH is allocated in the Radio Link Setup procedure, the processing cost associated to this PDSCH, equal to the DL cost RL, shall be debited from the Capacity Credit, in addition to the processing cost of the radio links. In a similar way, this cost shall be credited to the Capacity Credit, when a PDSCH is deleted and the difference between the new cost and the old cost shall be debited from the Capacity Credit (or credited if this difference is negative) when a PDSCH is reconfigured.]

[FDD- The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by either the radio links or the PDSCH, the cost credited to or debited from the Capacity Credit shall be taken as N times the cost for one code, where N is the number of channelization codes.]

[TDD –The cost for a radio link is a sum of the costs for each DPCH. For the first DPCH assigned to any user in a cell within a timeslot, the initial cost for a DPCH in a timeslot (cost 1) and the cost for a DPCH (cost 2) shall be taken into account. For any DPCH that is not the first DPCH assigned for any user in a cell within a timeslot, only the cost for a DPCH (cost 2) shall be taken into account.]

[TDD – The cost for shared channels is a the sum of the costs for each PDSCH and PUSCH assigned to a PUSCH or PDSCH set. For the first PDSCH or PUSCH assigned to any user in a cell within a timeslot, the initial cost for a PDSCH/PUSCH in a timeslot (cost 1) and the cost for a PDSCH/PUSCH (cost 2) shall be taken into account. For any PDSCH/PUSCH that is not the first PDSCH/PUSCH assigned to any user in a cell within a timeslot, only the cost for a PDSCH/PUSCH (cost 2) shall be taken into account.]

[TDD - In the case of Physical Shared Channel Reconfiguration, the sum of the consumption cost of the each PDSCH/PUSCH of the previous configuration shall be credited to the capacity credit, and the sum of the consumption cost of each PDSCH/PUSCH of the new configuration shall be subtracted from the capacity credit.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SF Allocation Law SF allocation-law		1..<maxno of SFs>1..<MaxNumber of SF>		[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD - For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL Cost 1	M		INTEGER (0..65535)	[FDD - This is the cost of a RLS _{sf} .] [TDD - This is the additional cost of the first DPCH/PDSCH/PUSCH assigned to any user in a cell within a timeslot.]
>DL Cost 2	M		INTEGER (0..65535)	[FDD - This is the cost of a RLS _{sf} .] [TDD - This is the cost of a DPCH/PDSCH/PUSCH]
>UL Cost 1	M		INTEGER (0..65535)	FDD - This is the cost of a RLS _{sf} . [TDD - This is the additional cost of the first DPCH/PDSCH/PUSCH assigned to any user in a cell within a timeslot.]
>UL Cost 2	M		INTEGER (0..65535)	[FDD - This is the cost of a RLS _{sf} .] [TDD - This is the cost of a DPCH/PDSCH/PUSCH.]

Range Bound	Explanation
MmaxNumber of SFs	Maximum number of Spreading Factors

9.2.1.20B DL or Global Capacity Credit

The capacity credit indicates to the CRNC the Downlink or global capacity of a Local Cell or a Local Cell Group.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL or Global Capacity Credit			INTEGER (0..65535)	

9.2.1.20C DCH Information Response

The *DCH Information Response* IE provides information for DCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
DCH Information Response		1..<maxno of DCHs>1 to <maxno of DCHs>		Only one DCH per set of coordinated DCHs shall be included
>DCH ID	M		9.2.1.20	
>Binding ID	O		9.2.1.4	
>Transport Layer Address	O		9.2.1.63	

Range bBound	Explanation
<i>M</i> _{maxnoofDCHs}	Maximum number of DCH per UE.

9.2.1.21 DL Power

The *DL Power* ~~DL Power~~-IE indicates a power level relative to the [FDD_ primary CPICH power] [TDD_ primary CCPCH power] configured in a cell. [FDD_ If referred to a DPCH, it indicates the power of the transmitted DPDCH symbols]. [FDD_ If referred to a DL-DPCCH for CPCH, it indicates the power of the transmitted pilot symbols].

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
DL Power			Enumerated(-35..+15dB)	Step 0.1dB

9.2.1.22 Dedicated Measurement Object Type

The Dedicated Measurement Object type indicates the type of object that the measurement is to be performed on.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated Measurement Object Type			ENUMERATED (RL, RLS, ALL RL, ALL RLS,...)	

Void.

9.2.1.23 Dedicated Measurement Type

The Dedicated Measurement Type identifies the type of measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated Measurement Type			ENUMERATED (SIR, SIR Error, Transmitted Code Power, RSCP, Rx Timing Deviation, Round Trip Time, ..., Rx Timing Deviation LCR)	"RSCP" is used by TDD only. "Rx Timing Deviation" is used by 3.84Mcps TDD only. "Rx Timing Deviation LCR" is used by 1.28 Mcps TDD only. "Round Trip Time", "SIR Error" are used by FDD only.

Note: For definitions of the measurement types refer to [4] and [5].

9.2.1.24 Dedicated Measurement Value

The Dedicated Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE <i>Dedicated Measurement Value</i>					⚠	
->> <i>SIR Value</i>					⚠	
>> <i>SIR Value</i>	M		INTEGER (0..63)	According to mapping in [22] and [23]	⚠	
->> <i>SIR Error Value</i>				FDD only	⚠	
>> <i>SIR Error Value</i>	M		INTEGER (0..125)	According to mapping in [22]	⚠	
->> <i>Transmitted Code Power Value</i>					⚠	
>> <i>Transmitted Code Power Value</i>	M		INTEGER (0..127)	According to mapping in [22] and [23]. Values 0 to 9 and 123 to 127 shall not be used.	⚠	
->> <i>RSCP</i>				TDD only	⚠	
>> <i>RSCP</i>	M		INTEGER (0..127)	According to mapping in [23]	⚠	
->> <i>Rx Timing Deviation Value</i>				Applicable to 3.84Mcps TDD only	⚠	
>> <i>Rx Timing Deviation</i>	M		INTEGER (0..8191)	According to mapping in [23]	⚠	
->> <i>Round Trip Time</i>				FDD only	⚠	
>> <i>Round Trip Time</i>	M		INTEGER (0..32767)	According to mapping in [22]	⚠	
> <i>Additional Dedicated Measurement Values</i>					⚠	
->> <i>Rx Timing Deviation Value LCR</i>				Applicable to 1.28Mcps TDD only	⚠	
>>> <i>Rx Timing Deviation LCR</i>	M		INTEGER (0..255)	According to mapping in [23]	YES	reject

9.2.1.24A Dedicated Measurement Value Information

The *Dedicated Measurement Value Information* IE provides information both on whether or not the Dedicated Measurement Value is provided in the message or not and if provided also the Dedicated Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Measurement Availability Indicator</i>	M			
->> <i>Measurement Available</i>				
>> <i>Dedicated Measurement Value</i>	M		9.2.1.24	
>> <i>CFN</i>	O		9.2.1.7	Dedicated Measurement Time Reference
->> <i>Measurement Not Available</i>			NULL	

9.2.1.24B DGPS Corrections

The DGPS Corrections IE contains DGPS information used by the UE Positioning A-GPS method. For further details on the meaning of parameters, see [28].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GPS TOW	M		INTEGER (0..604799)	Time in seconds. This field indicates the baseline time for which the corrections are valid
Status/Health	M		ENUMERATED_(UDRE scale 1.0, UDRE scale 0.75, UDRE scale 0.5, UDRE scale 0.3, UDRE scale 0.1, no data, invalid data)	This field indicates the status of the differential corrections
Satellite Information				
		1..<Mmax NoSat>		
->SatID	M		INTEGER (0..63)	Satellite ID
->IODE	M		Bit string BIT STRING (8)	This IE is the sequence number for the ephemeris for the particular satellite. It can be used to determine if new ephemeris is used for calculating the corrections that are provided. This eight-bit IE is incremented for each new set of ephemeris for the satellite and may occupy the numerical range of [0, 239] during normal operations.
->UDRE	M		ENUMERATED_(UDRE ≤1.0m, 1.0m < UDRE ≤ 4.0m, 4.0m < UDRE ≤ 8.0m, 8.0m < UDRE)	User Differential Range Error. This field provides an estimate of the uncertainty (1-σ) in the corrections for the particular satellite. The value in this field shall be multiplied by the UDRE Scale Factor in the common Corrections Status/Health field to determine the final UDRE estimate for the particular satellite
->PRC	M		INTEGER (-2047..2047)	Pseudo Range Correction Unit: m (meters) Step: Scaling factor 0.32 meters
>Range Correction Rate	M		INTEGER (-127..127)	Unit: m/s Step: Scaling factor 0.032 m/s

Range Bound	Explanation
maxNoSat/MaxNoSat	Maximum number of satellites for which information can be provided

9.2.1.25 Diversity Control Field

The Diversity Control Field indicates if the current RL may, must or must not be combined with the already existing RLs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Diversity Control Field			ENUMERATED_(May, Must, Must #Not)	

9.2.1.26 Diversity Indication

The Diversity Indication indicates if the RL has been or has not been combined with another RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Diversity Indication			ENUMERATED (Combined, Not Combined)	
Void				

9.2.1.27 DSCH ID

The DSCH ID uniquely identifies a DSCH within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
DSCH ID			INTEGER (0..255)	

9.2.1.27A DSCH Information Response

The *DSCH Information Response* IE provides information for DSCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
DSCH Information Response		<i>1..<maxno of DSCHs> 1 to <Numof DSCH></i>		
>DSCH ID	M		9.2.1.27	
>Binding ID	O		9.2.1.4	
>Transport Layer Address	O		9.2.1.63	

Range Bound	Explanation
<i>MmaxnoofDSCHs</i>	Maximum number of DSCHs for one UE.

9.2.1.28 DSCH Transport Format Set

Void

9.2.1.29 DSCH Transport Format Combination Set

Void

9.2.1.29A End Of Audit Sequence Indicator

Indicates if the AUDIT RESPONSE message ends an audit sequence or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
End Of Audit Sequence Indicator			ENUMERATED_(End of audit sequence, Not end of audit sequence)	"End of audit sequence" = all audit information has been provided by the Node B; "Not end of audit sequence" = more audit information is available.

9.2.1.29B FN Reporting Indicator

The Frame Number Reporting Indicator.

Indicates if the SFN or CFN shall be included together with the reported measurement value.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FN Reporting Indicator			ENUMERATED_(FN Reporting Required, FN Reporting Not Required)	

9.2.1.30 Frame Handling Priority

This parameter indicates the priority level to be used during the lifetime of the DCH/DSCH for temporary restriction of the allocated resources due overload reason.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Handling Priority			INTEGER (0..15)	"0" = lowest priority, " <u>15</u> " = highest priority

9.2.1.31 Frame Offset

The Frame Offset is the required offset between the dedicated channel downlink transmission frames (CFN, Connection Frame Number) and the broadcast channel frame offset (Cell Frame Number). The Frame_offset is used in the translation between Connection Frame Number (CFN) on Iub/Iur and the least significant 8 bits of SFN (System Frame Number) on Uu. The Frame Offset is UE and cell specific.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Offset			INTEGER (0..255)	Frames

9.2.1.31A IB_OC_ID

The IB OC ID identifies the occurrence of a specific Information Block.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB OC ID			INTEGER (1..16)	

9.2.1.31B GPS Navigation Model & Time Recovery

This IE contains subframes 1 to 3 of the GPS navigation message. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Navigation Message 1to3		$1..<Mmax$ $NoSat>$		
—>Transmission TOW	M		INTEGER (0..1048575)	Time of the Week when the message is broadcast.
—>SatID	M		INTEGER (0..63)	Satellite ID of the satellite from which the information is obtained
—>TLM Message	M		Bit stringBIT STRING (14)	
>Tlm Revd (C)	M		Bit stringBIT STRING (2)	
—>HO-Word	M		Bit stringBIT STRING (22)	
—>WN	M		Bit stringBIT STRING (10)	
—>C/A or P on L2	M		Bit stringBIT STRING (2)	
—>User Range Accuracy Index	M		Bit stringBIT STRING (4)	
—>SV Health	M		Bit stringBIT STRING (6)	
—>IODC	M		Bit stringBIT STRING (10)	
—>L2 P Data Flag	M		Bit stringBIT STRING (1)	
—>SF 1 Reserved	M		Bit stringBIT STRING (87)	
—> T_{GD}	M		Bit stringBIT STRING (8)	
—> t_{oc}	M		Bit stringBIT STRING (16)	
—> af_2	M		Bit stringBIT STRING (8)	
—> af_1	M		Bit stringBIT STRING (16)	
—> af_0	M		Bit stringBIT STRING (22)	
-> C_{rs}	M		Bit stringBIT STRING (16)	
—> Δn	M		Bit stringBIT STRING (16)	
—> M_0	M		Bit stringBIT STRING (32)	
—> C_{uc}	M		Bit stringBIT STRING (16)	
—> e	M		Bit stringBIT STRING (32)	
—> C_{us}	M		Bit stringBIT STRING (16)	
—> $(A)^{1/2}$	M		Bit stringBIT STRING (32)	
—> t_{oe}	M		Bit stringBIT STRING (16)	
—>Fit Interval Flag	M		Bit stringBIT STRING (1)	
—>AODO	M		Bit stringBIT STRING (5)	
—> C_{ic}	M		Bit stringBIT STRING (16)	
—> Ω_0	M		Bit stringBIT STRING (32)	
—> C_{is}	M		Bit stringBIT STRING (16)	
—> i_0	M		Bit stringBIT STRING (32)	

—>C _{rc}	M		Bit string BIT STRING (16)	
—> ω	M		Bit string BIT STRING (32)	
—>OMEGA _{dot}	M		Bit string BIT STRING (24)	
—>ldot	M		Bit string BIT STRING (14)	
—>Spare/zero fill	M		Bit string BIT STRING (20)	

Range Bound	Explanation
maxNoSat MaxNoSat	Maximum number of satellites for which information can be provided

9.2.1.31C GPS Ionospheric Model

This IE provides the information regarding the GPS Ionospheric Model. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
α_0	M		Bit string BIT STRING (8)	
α_1	M		Bit string BIT STRING (8)	
α_2	M		Bit string BIT STRING (8)	
α_3	M		Bit string BIT STRING (8)	
β_0	M		Bit string BIT STRING (8)	
β_1	M		Bit string BIT STRING (8)	
β_2	M		Bit string BIT STRING (8)	
β_3	M		Bit string BIT STRING (8)	

9.2.1.31D GPS UTC Model

This IE provides the information regarding the GPS UTC Model. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
A ₁	M		Bit string BIT STRING (24)	
A ₀	M		Bit string BIT STRING (32)	
t _{tot}	M		Bit string BIT STRING (8)	
Δt_{LS}	M		Bit string BIT STRING (8)	
WN _t	M		Bit string BIT STRING (8)	
WN _{LSF}	M		Bit string BIT STRING (8)	
DN	M		Bit string BIT STRING (8)	
Δt_{LSF}	M		Bit string BIT STRING (8)	

9.2.1.31E -GPS Real-Time Integrity

This IE provides the information regarding the status of the GPS constellation. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Bad Satellites Presence</i>	M			
→ <i>Bad Satellites</i>				
→> Satellite information		1..<Mmax NoSat>		
→>> BadSatID	M		INTEGER (0..63)	Satellite ID
> <i>No Bad Satellites</i>			NULL	

Range Bound	Explanation
maxNoSat MaxNoSat	Maximum number of satellites for which information can be provided

9.2.1.31F GPS Almanac

This IE provides the information regarding the GPS Almanac. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
WN _a	M		Bit string BIT STRING (8)	
Satellite information	M	1..<Mmax xNoSat>		
>DataID	M		INTEGER (0..3)	
>SatID	M		INTEGER (0..63)	Satellite ID
>e	M		Bit string BIT STRING (16)	
>t _{oa}	M		Bit string BIT STRING (8)	
>δi	M		Bit string BIT STRING (16)	
>OMEGADOT	M		Bit string BIT STRING (16)	
>SV Health	M		Bit string BIT STRING (8)	
>A ^{1/2}	M		Bit string BIT STRING (24)	
>OMEGA ₀	M		Bit string BIT STRING (24)	
>M ₀	M		Bit string BIT STRING (24)	
>ω	M		Bit string BIT STRING (24)	
>af ₀	M		Bit string BIT STRING (11)	
>af ₁	M		Bit string BIT STRING (11)	
SV Global Health	O		Bit string BIT STRING (364)	

Range Bound	Explanation
maxNoSat MaxNoSat	Maximum number of satellites for which information can be provided

9.2.1.31G GPS Receiver Geographical Position (GPS RX Pos)

The GPS Receiver Geographical Position is used to identify the geographical coordinates of a GPS receiver relevant for a certain Information Exchange Object.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Latitude Sign	M		ENUMERATED (North, South)	
Degrees of Latitude	M		INTEGER (0..2 ²³ -1)	The IE value (N) is derived by this formula: N ≤ 2 ²³ X / 90 < N+1 X being the latitude in degree (0°.. 90°)
Degrees of Longitude	M		INTEGER (-2 ²³ ..2 ²³ -1)	The IE value (N) is derived by this formula: N ≤ 2 ²⁴ X / 360 < N+1 X being the longitude in degree (-180°..+180°)
Direction of Altitude	M		ENUMERATED (Height, Depth)	
Altitude	M		INTEGER (0..2 ¹⁵ -1)	The relation between the value (N) and the altitude (a) in meters it describes is N ≤ a < N+1, except for N=2 ¹⁵ -1 for which the range is extended to include all greater values of (a).

9.2.1.32 IB_SG_DATA

Segment as defined in ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_DATA			Bit String BIT STRING	Contains "SIB data fixed" or "SIB data variable" in segment as encoded in ref. [18].

9.2.1.33 IB_SG_POS

The lowest position of a specific Information Block segment in the SFN cycle (IB_SG_POS < IB_SG_REP).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_POS			INTEGER (0..4094)	Only even positions are allowed. See ref. [18]

9.2.1.34 IB_SG_REP

Repetition distance for an Information Block segment. The segment shall be transmitted when SFN mod IB_SG_REP = IB_SG_POS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_REP			ENUMERATED (4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096)	Repetition period for the IB segment in frames

9.2.1.35 IB Type

The IB Type identifies a specific system information block.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB Type			Enumerated ENUMERATED (MIB, SB1, SB2, SIB1, SIB2, SIB3, SIB4, SIB5, SIB6, SIB7, SIB8, SIB9, SIB10, SIB11, SIB12, SIB13, SIB13.1, SIB13.2, SIB13.3, SIB13.4, SIB14, SIB15, SIB15.1, SIB15.2, SIB15.3, SIB16, ..., SIB17, SIB15.4, SIB18)	

9.2.1.36 Indication Type

The indication type shall indicate the category of a failure with respect to its impact on the logical resources supported at the Node-B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Indication Type			ENUMERATED (No-Failure, Service-Impacting, ...)	Service-Impacting – The failure has impacted on the logical resources supported at the Node-B.

Void.

9.2.1.36A Information Exchange Object Type

The Information Exchange Object type indicates the type of object that the requested information shall be valid for.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Information Exchange Object Type			ENUMERATED (Cell, ...)	
Void				

9.2.1.36B Information Report Characteristics

The information report characteristics defines how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Information Report Characteristics Type				
->>On_Demand			NULL	
->>Periodic				
>>Information Report Periodicity	M		ENUMERATED (1min...1hr,...) step 1min, (1hr...24hr,...) step 1hr, ...	The frequency with which the Node B shall send information reports.
>>CHOICE Information Report Periodicity Scale	M			The frequency with which the Node B shall send information reports.
>>>minute				
>>>>Report Periodicity Value	M		INTEGER (1..60,...)	Unit: min
>>>hour				
>>>>Report Periodicity Value	M		INTEGER (1..24,...)	Unit: h
->>On Modification				
>>Information Threshold	O		9.2.1.36E	

9.2.1.36C Information Exchange ID

The Information Exchange ID uniquely identifies any requested information per Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Information Exchange ID	M		INTEGER (0..2^20-1)	

9.2.1.36D Information Type

The Information Type indicates which kind of information the Node B shall provide.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Information Type Item	M		ENUMERATED_(GPS Information, DGPS Corrections, GPS RX Pos, ...)	
GPS Information	C-GPS	0..<Mmax NoGPSItems>		
>GPS Information Item			ENUMERATED_(GPS Navigation Model & Time Recovery, GPS Ionospheric Model, GPS UTC Model, GPS Almanac, GPS Real-Time Integrity, ...)	

Condition	Explanation
GPS	The IE shall be present if the <i>Information Type Item</i> IE indicates "GPS Information".

Range Bound	Explanation
maxNoGPSItems MaxNoGPSItems	Maximum number of GPS Information Items supported in one Information Exchange

9.2.1.36E Information Threshold

The Information Threshold indicates which kind of information shall trigger the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Information Type Item</i>	M			
—>DGPS				
—>>PRC Deviation	M		ENUMERATED (1, 2, 5, 10, ...)	PRC deviation in meters from the previously reported value, which shall trigger a report

9.2.1.36F IPDL Indicator

Indicates if IPDL periods shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IPDL Indicator			ENUMERATED_(active, inactive)	

9.2.1.37 Limited Power Increase

Void.

9.2.1.37A Local Cell Group ID

The Local Cell Group ID represents resources in the Node B, which have been pooled from a capacity point of view.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Local Cell Group ID			Local Cell ID 9.2.1.38	

9.2.1.38 Local Cell ID

The local cell ID represents resources in the Node B that can be used for the configuration of a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Local Cell ID			INTEGER (0..268435455)	

9.2.1.39 Maximum DL Power Capability

This parameter indicates the maximum DL power capability for a local cell within the Node B. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum DL Power Capability			ENUMERATED INTEGER (0..500)	Unit: dBm Range: 0..50 dBm Stepgranularity: 0.1 dB 0: 0 dBm 1: 0.1 dBm ... 499: 49.9 dBm 500: 50.0 dBm

9.2.1.40 Maximum Transmission Power

The Maximum Transmission Power is the maximum power for all downlink channels added together, that is allowed to be used simultaneously in a cell. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Transmission Power			ENUMERATED INTEGER (0..500)	Unit: dBm Range: 0..50 dBm StepGranularity: 0.1 dB 0: 0 dBm 1: 0.1 dBm ... 499: 49.9 dBm 500: 50.0 dBm

9.2.1.40A Measurement Availability Indicator

Indicates if the measurement is available or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Availability Indicator			ENUMERATED (measurement available, measurement not available)	

Void.

9.2.1.40B Measurement Change Time

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Scale				
>millisecond				
>>Measurement Change Time Value	M		INTEGER (1..6000,...)	Unit: ms Range: 10..60000 ms Step: 10 ms

9.2.1.41 Measurement Filter Coefficient

The Measurement Filter Coefficient determines the amount of filtering to be applied for measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Filter Coefficient			ENUMERATED (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 17, 19,...)	

9.2.1.41A Measurement Hysteresis Time

The Measurement Hysteresis Time provides the duration during which a reporting criterion has to be fulfilled for the Measurement Reporting procedure to be triggered.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Scale				
>millisecond				
>>Measurement Hysteresis Time Value	M		INTEGER (1..6000,...)	Unit: ms Range: 10..60000 ms Step: 10 ms

9.2.1.42 Measurement ID

The Measurement ID uniquely identifies any measurement per (Node B- or eCommunication) eControl pPort.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement ID			Integer INTEGER (0..-2^20-1)	

9.2.1.43 Measurement Increase/Decrease Threshold

The Measurement Increase/Decrease Threshold defines the threshold that shall trigger Event C or D.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Measurement Increase/Decrease Threshold</i>				
<i>->>Received Total Wide Band Power</i>				
>>Received t Total w Wide b Band p Power	M		INTEGER_(0..620)	Unit: dB Range: 0..62 dB Step: 0.1 0: 0 dB 1: 0.1 dB 2: 0.2 dB ... 620: 62dB
<i>->>Transmitted Carrier Power</i>				
>>Transmitted Carrier Power	M		INTEGER_(0..100)	According to mapping in [22] and [23]
<i>->>Acknowledged PRACH Preambles</i>				FDD only
>>Acknowledged PRACH Preambles	M		INTEGER (0..240,...)	According to mapping in [22]
<i>->>UL Timeslot ISCP</i>				TDD only
>>UL Timeslot ISCP	M		INTEGER_(0..126)	Unit: dB Range: 0..63 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 126: 63 dB, [TDD only]
<i>->>SIR</i>				
>>SIR	M		INTEGER_(0..62)	Unit: dB Range: 0..31 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 62: 31dB
<i>->>SIR Error</i>				FDD only
>>SIR Error	M		INTEGER_(0..124)	Unit: dB Range: 0..62 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 124: 62 dB
<i>->>Transmitted Code Power</i>				
>>Transmitted Code Power	M		INTEGER (0..112,...)	Unit: dB Range: 0..56 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 112: 56 dB
<i>->>RSCP</i>				TDD only
>>RSCP	M		INTEGER_(0..126)	Unit: dB Range: 0..63 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 126: 63 dB
<i>->>Round Trip Time</i>				FDD only
>>Round Trip Time	M		INTEGER_(0..32766)	Unit: chips Range: 0 .. 2047.875 chips Step: 0.625 0: 0 chips 1: 0.0625 chips 2: 0.1250 chips ...

				32766: 2047.875 chips
<i>->>Acknowledged PCPCH Access Preambles</i>				FDD only
>>Acknowledged PCPCH Access Preambles	M		INTEGER_(0..15,...)	According to mapping in [22]
<i>->>Detected PCPCH Access Preambles</i>				FDD only
>>Detected PCPCH Access Preambles	M		INTEGER (0..240,...)	According to mapping in [22]

9.2.1.44 Measurement Threshold

The Measurement Threshold defines which threshold that shall trigger Event A, B, E, F or On Modification.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Measurement Threshold					☐	
>>Received Total Wide Band Power					☐	
>>Received Total Wide Band Power	M		INTEGER (0..621)	According to mapping in [22] and [23]	☐	
>>Transmitted Carrier Power					☐	
>>Transmitted Carrier Power	M		INTEGER (0..100)	According to mapping in [22] and [23]	☐	
>>Acknowledged PRACH Preambles				FDD only	☐	
>>Acknowledged PRACH Preambles	M		INTEGER (0..240,...)	According to mapping in [22]	☐	
>>UL Timeslot ISCP				TDD only	☐	
>>UL Timeslot ISCP	M		INTEGER (0..127)	According to mapping in [23]	☐	
>>SIR					☐	
>>SIR	M		INTEGER (0..63)	According to mapping in [22] and [23]	☐	
>>SIR Error				FDD only	☐	
>>SIR Error	M		INTEGER (0..125)	According to mapping in [22]	☐	
>>Transmitted Code Power					☐	
>>Transmitted Code Power	M		INTEGER (0..127)	According to mapping in [22] and [23]	☐	
>>RSCP				TDD only	☐	
>>RSCP	M		INTEGER (0..127)	According to mapping in [23]	☐	
>>Rx Timing Deviation				Applicable to 3.84Mcps TDD only	☐	
>>Rx Timing Deviation	M		INTEGER (0..8191)	According to mapping in [23]	☐	
>>Round Trip Time				FDD only	☐	
>>Round Trip Time	M		INTEGER (0..32767)	According to mapping in [22]	☐	
>>Acknowledged PCPCH Access Preambles				FDD only	☐	
>>Acknowledged PCPCH Access Preambles	M		INTEGER (0..15,...)	According to mapping in [22]	☐	
>>Detected PCPCH Access Preambles				FDD only	☐	
>>Detected PCPCH Access Preambles	M		INTEGER (0..240,...)	According to mapping in [22]	☐	
>>Additional Measurement Thresholds					☐	
>>>UTRAN GPS Timing of Cell Frames for LCSUE Positioning					☐	
>>>T _{UTRAN-GPS} Measurement Threshold Information	M		9.2.1.64B		YES	reject
>>>SFN-SFN Observed Time Difference					☐	
>>>SFN-SFN Measurement	M		9.2.1.53C		YES	reject

Threshold Information						
-----------------------	--	--	--	--	--	--

9.2.1.45 Message Discriminator

This field is used to discriminate between Dedicated NBAP and Common NBAP messages.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Message Discriminator			ENUMERATED_ (Common, Dedicated)	

9.2.1.45A Message Structure

The *Message Structure* IE gives information for each level with assigned criticality in an hierarchical message structure from top level down to the lowest level above the reported level for the occurred error (reported in the *Information Element Criticality Diagnostics* IE).

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message-structure		1 to <maxnooff levels>		The first repetition of the <i>Message Structure</i> IE corresponds to the top-level of the message. The last repetition of the <i>Message Structure</i> IE corresponds to the level above the reported level for the occurred error of the message.	GLOBAL	ignore
>IE-ID	M		INTEGER (0..65535)	The IE-ID of this level's IE containing the not understood or missing IE.	!	
>Repetition-Number	O		INTEGER (1..256)	The <i>Repetition Number</i> IE gives, if applicable, the number of occurrences of this level's reported IE up to and including the occurrence containing the not understood or missing IE. Note: All the counted occurrences of the reported IE must have the same topdown hierarchical message structure of IEs with assigned criticality above them.	!	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Message Structure		1..<maxnooflevels>		The first repetition of the Message Structure IE corresponds to the top level of the message. The last repetition of the Message Structure IE corresponds to the level above the reported level for the occurred error of the message.
>IE ID	M		INTEGER (0..65535)	The IE ID of this level's IE containing the not understood or missing IE.
>Repetition Number	O		INTEGER (1..256)	The Repetition Number IE gives, if applicable, the number of occurrences of this level's reported IE up to and including the occurrence containing the not understood or missing IE. Note: All the counted occurrences of the reported IE must have the same topdown hierachical message structure of IEs with assigned criticality above them.

Range bBound	Explanation
maxnooflevels/maxnooflevels	Maximum no-number of message levels to report. The value for maxnooflevels is 256.

9.2.1.46 Message Type

The Message Type uniquely identifies the message being sent.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Procedure ID	M	14		
>Procedure Code	M		INTEGER (0..255)ENUMERATED { COMMON TRANSPORT CHANNEL SETUP, COMMON TRANSPORT CHANNEL RECONFIGURATION, COMMON TRANSPORT CHANNEL DELETION, BLOCK RESOURCE, UNBLOCK RESOURCE, AUDIT REQUIRED, AUDIT, COMMON MEASUREMENT INITIATION, COMMON MEASUREMENT REPORTING, COMMON MEASUREMENT TERMINATION, COMMON MEASUREMENT FAILURE, CELL SETUP, CELL RECONFIGURATION, CELL DELETION, RESOURCE STATUS INDICATION, SYSTEM INFORMATION UPDATE, RL SETUP, RL ADDITION, SYNCHRONISED RL RECONFIGURATION PREPARATION, SYNCHRONISED RL RECONFIGURATION COMMIT, SYNCHRONISED RL RECONFIGURATION CANCELLATION, UNSYNCHRONISED RL RECONFIGURATION	"0" = Audit "1" = Audit Required "2" = Block Resource "3" = Cell Deletion "4" = Cell Reconfiguration "5" = Cell Setup "6" = Common Measurement Failure "7" = Common Measurement Initiation "8" = Common Measurement Report "9" = Common Measurement Termination "10" = Common Transport Channel Deletion "11" = Common Transport Channel Reconfigure "12" = Common Transport Channel Setup "13" = Reset "14" = Compressed Mode Command "16" = Dedicated Measurement Failure "17" = Dedicated Measurement Initiation "18" = Dedicated Measurement Report "19" = Dedicated Measurement Termination "20" = Downlink Power Control "21" = Error Indication (For Dedicated Procedures) "23" = Radio Link Addition "24" = Radio Link Deletion "25" = Radio Link Failure "26" = Radio Link Restoration "27" = Radio Link Setup "28" = Resource Status Indication "29" = Synchronised Radio Link Reconfiguration Cancellation "30" = Synchronised Radio Link Reconfiguration Commit "31" = Synchronised Radio Link Reconfiguration Preparation "32" = System Information Update "33" = Unblock Resource "34" = Unsynchornised Radio Link Reconfiguration "35" = Error Indication (For Common Procedures) "37" = Physical Shared Channel Reconfiguration "38" = Downlink Power Timeslot Control "39" = Radio Link Preemption "40" = Information Exchange Failure "41" = Information Exchange Initiation "42" = Information Exchange Termination "43" = Information Reporting "44" = Cell Synchronisation Adjustment "45" = Cell Synchronisation Initiation "46" = Cell Synchronisation Reconfiguration "47" = Cell Synchronisation Reporting "48" = Cell Synchronisation Termination "49" = Cell Synchronisation Failure

			<p>ION, RL DELETION, DL POWER CONTROL, DL POWER CONTROL, TIMESLOT DEDICATED MEASUREMENT INITIATION, DEDICATED MEASUREMENT REPORTING, DEDICATED MEASUREMENT TERMINATION, DEDICATED MEASUREMENT FAILURE, RL FAILURE, RL RESTORATION, COMPRESSED MODE COMMAND, ERROR INDICATION, PHYSICAL SHARED CHANNEL RECONFIGURATION, RESET, ... INFORMATION EXCHANGE INITIATION, INFORMATION REPORTING, INFORMATION EXCHANGE TERMINATION, INFORMATION EXCHANGE FAILURE, CELL SYNCHRONISATION INITIATION, CELL SYNCHRONISATION RECONFIGURATION, CELL SYNCHRONISATION REPORTING, CELL SYNCHRONISATION TERMINATION, CELL SYNCHRONISATION FAILURE, CELL SYNCHRONISATION ADJUSTMENT)</p>	
>Ddmode	M		ENUMERATED (Common = common to FDD and TDD.

			FDD, TDD, FDD, Common, ...)	
Type of Message	M		ENUMERATED (Initiating Message, Successful Outcome, Unsuccessful Outcome, Outcome)	

9.2.1.46A Minimum DL Power Capability

This parameter indicates the minimum DL power capability for a local cell within the Node B. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum DL Power Capability			ENUMERATED INTEGER (0..800)	Unit: dBm; Range: -30 .. +50 dBm Stepgranularity: 0.1 dB 0: -30.0 dBm 1: -29.9 dBm ... 799: 49.9 dBm 800: 50.0 dBm

9.2.1.47 Minimum Spreading Factor

This parameter indicates the minimum spreading factor supported at a cell within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum Spreading Factor			Enumerated ENUMERATED (4, 8, 16, 32, 64, 128, 256, 512)	

9.2.1.47A N_INSYNC_IND

This parameter defines the number of successive in-sync indications after which is used by the Node B for achievement/re-achievement of UL synchronisation on the Uu interface as defined in shall trigger the Radio Link Restore procedure (see also ref. [10] and [21]).

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_INSYNC_IND			Integer INTEGER (1, 2.., 256)	

9.2.1.47B N_OUTSYNC_IND

This parameter defines the number of consecutive out-of-sync indications after which the timer T_RLFAILURE shall be started (see also ref. [10] and [21]).

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_OUTSYNC_IND			Integer-INTEGER (1, 2, ..., 256)	

9.2.1.47C Neighbouring FDD Cell Measurement Information

This IE provides information on the FDD neighbouring cells used for the purpose of measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UC-Id	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nd [14]
Primary Scrambling Code	M		9.2.2.34	

9.2.1.47D Neighbouring TDD Cell Measurement Information

This IE provides information on the 3.84Mcps TDD neighbouring cells used for the purpose of measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UC-Id	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nt [15]
Cell Parameter ID	M		9.2.3.4	
Time slot	O		9.2.3.23	
Midamble Shift And Burst Type	O		9.2.3.7	

9.2.1.48 Node B Communication Context ID

The Node B Communication Context ID is the identifier of the Communication Context in the Node B, it corresponds to the dedicated resources which are necessary for an UE using one or more dedicated channels in a given Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Node B Communication Context ID			INTEGER (0.. $2^{20}-1$)	" $2^{20}-1$ " is a reserved value to indicate all the existing and future Node B Communication Contexts that can be reached by the Communication Control Port (All NBCC).

9.2.1.49 Payload CRC Presence Indicator

This parameter indicates whether FP payload 16 bit CRC is used or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Payload CRC Presence Indicator			ENUMERATED (CRC Included, CRC Not Included)	

9.2.1.49A PICH Power

The *PICH Power* IE indicates a power level relative to the [FDD-*p*Primary CPICH power] [TDD-*p*Primary CCPCH power] configured in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PICH Power			Enumerated INTEGER (-10..+5dB)	Unit: dB Range: -10 .. +5 dB Step: 1dB

9.2.1.50 Puncture Limit

The Puncture Limit limits the amount of puncturing that can be applied in order to minimise the number of dedicated physical channels.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Puncture Limit			INTEGER (0..15)	Unit: % Range: 40..100 % Step: 4 0-40% 1: 44 % ... 14: 96% 15: 100% means (no puncturing)

9.2.1.50A QE-Selector

The QE-Selector indicates from which source the value for the quality estimate (QE) shall be taken.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
QE-Selector			ENUMERATED_ (sSelected, nNon-sSelected)	

9.2.1.51 Report Characteristics

The report characteristics, defines how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Report Characteristics					■	
>>On_Demand			NULL		■	
>>Periodic					■	
>>Report Periodicity	M		9.2.1.51aENUMERATED (10ms...1min,...) step 10ms, (1min...1hr,...) step 1min,...	The frequency with which the Node B shall send measurement reports.	■	
>>Event A					■	
>>Measurement Threshold	M		Measurement Threshold 9.2.1.44	The threshold for which the Node B shall trigger a measurement report.	■	
>>Measurement Hysteresis Time	O		9.2.1.41aENUMERATED (10ms...1min,...) step 10ms,...		■	
>>Event B					■	
>>Measurement Threshold	M		Measurement Threshold 9.2.1.44	The threshold for which the Node B shall trigger a measurement report.	■	
>>Measurement Hysteresis Time	O		9.2.1.41aENUMERATED (10ms...1min,...) step 10ms,...		■	
>>Event C					■	
>>Measurement Increase/Decrease Threshold	M		Measurement Increase/Decrease Threshold 9.2.1.43		■	
>>Measurement Change Time	M		9.2.1.40bENUMERATED (10ms...1min,...) step 10ms,...	The time the measurement entity shall rise on (in ms), in order to trigger a measurement report.	■	
>>Event D					■	
>>Measurement Increase/Decrease Threshold	M		Measurement Increase/Decrease Threshold 9.2.1.43		■	
>>Measurement Change Time	M		9.2.1.40bENUMERATED (10ms...1min,...) step 10ms,...	The time the measurement entity shall fall (in ms), in order to trigger a measurement report.	■	
>>Event E					■	
>>Measurement Threshold 1	M		Measurement Threshold 9.2.1.44		■	
>>Measurement Threshold 2	O		Measurement Threshold 9.2.1.44		■	
>>Measurement Hysteresis Time	O		9.2.1.41aENUMERATED (10ms...1min,...) step 10ms,...	The hysteresis time in ms	■	
>>Report	O		9.2.1.51aENUMERATED	The frequency with	■	

Periodicity			MERATED (10ms...1min, ...) step 10ms, (1min...1hr,...) step 1min,...	which the Node B shall send measurement reports.		
>>Event F						
>>Measurement Threshold 1	M		Measurement Threshold 9.2.1.44			
>>Measurement Threshold 2	O		Measurement Threshold 9.2.1.44			
>>Measurement Hysteresis Time	O		9.2.1.41AENU MERATED (10ms...1min, ...) step 10ms,...	The hysteresis time in ms		
>>Report Periodicity	O		9.2.1.51aENU MERATED (10ms...1min, ...) step 10ms, (1min...1hr,...) step 1min,...	The frequency with which the Node B shall send measurement reports.		
>Additional Report Characteristics						
>>>On Modification						
>>>On Modification		1			YES	reject
>>>Measurement Threshold	M		Measurement Threshold 9.2.1.44			

9.2.1.51a Report Periodicity

The Report Periodicity defines the frequency at which the Node B shall send measurement reports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Report Periodicity Scale				
>millisecond				
>>Report Periodicity Value	M		INTEGER (1..6000...)	Unit: ms Range: 10..60000 ms Step: 10 ms
>minute				
>>Report Periodicity Value	M		INTEGER (1..60...)	Unit: min Range: 1..60 min Step: 1 min

9.2.1.51A Requested Data Value

The Requested Data Value IE contains the relevant data concerning the ongoing information exchange. The Requested Data Value IE shall include at least one of the following IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DGPS Corrections	O		9.2.1.24B	
GPS Navigation Model & Time Recovery	O		9.2.1.31B	
GPS Ionospheric Model	O		9.2.1.31C	
GPS UTC Model	O		9.2.1.31D	
GPS Almanac	O		9.2.1.31F	
GPS Real-Time Integrity	O		9.2.1.31E	
GPS RX Pos	O		9.2.1.31G	

9.2.1.51B Requested Data Value Information

The *Requested Data Value Information* IE provides information both on whether or not the Requested Data Value is provided in the message or not and if provided also the Requested Data Value itself. In case of periodic reporting, "*Information Not Available*" shall be used when at least one part of the requested information was not available at the moment of initiating the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Information Availability Indicator</i>	M			
> <i>Information Available</i>				
>>Requested Data Value	M		9.2.1.51A	
> <i>Information Not Available</i>			NULL	

9.2.1.52 Resource Operational State

The *Resource Operational State* is used to indicate the current operational state of the associated resource following a Node B failure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Resource Operational State			ENUMERATED_(Enabled, Disabled)	When a resource is marked as disabled, then its child resources are implicitly disabled. Cell Resource hierarchy can be referred to [6].

9.2.1.52A Retention Priority

Void.

9.2.1.53 RL ID

The RL ID is the unique identifier for one RL associated with a UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL ID			INTEGER (0..31)	

9.2.1.53a RNC-Id

This is the identifier of one RNC in UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RNC-Id			INTEGER (0..4095)	

9.2.1.53A SFN

System Frame Number of the cell, see ref. [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SFN			Integer-INTEGER (0..4095)	

9.2.1.53B Segment Type

Segment type as defined in [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Segment Type			Enumerated-ENUMERATED (First segment, First segment short, Subsequent segment, Last segment, Last segment short, Complete SIB, Complete SIB short, ...)	

9.2.1.53C SFN-SFN Measurement Threshold Information

The SFN-SFN Measurement Threshold Information defines the related thresholds SFN-SFN Observed Time Difference measurements which shall trigger the Event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SFN-SFN Change Limit	O		INTEGER(1..256)	Change of SFN-SFN value compared to previously reported value, which shall trigger a new report. Unit: in 1/16 chip. Step: 1/16 chip
Predicted SFN-SFN Deviation Limit	O		INTEGER(1..256)	Deviation of the predicated SFN-SFN from the latest measurement result, which shall trigger a new report. Unit: in 1/16 chip. Step: 1/16 chip

9.2.1.53D SFN-SFN Measurement Time Stamp

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Mode				
>FDD				
>>SFN	M		9.2.1.53A	Indicates the SFN of the reference cell at which the measurement has been performed.
>TDD				
>>SFN	M		9.2.1.53A	Indicates the SFN of the reference cell at which the measurement has been performed.
>>Time Slot	M		9.2.3.23	Indicates the Time Slot of the reference cell at which this measurement has been performed.

9.2.1.53E SFN-SFN Measurement Value Information

The SFN-SFN Measurement Value Information IE indicates the measurement result related to SFN-SFN Observed Time Difference measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information		1..maxno MeasNCell >1..maxno MeasNCell		
>UC-Id	M		9.2.1.65B	
>SFN-SFN Value	M		9.2.1.53F	
>SFN-SFN Quality	O		INTEGER_(0..255)	Indicates the standard deviation of the SFN-SFN Observed Time Difference measurements in 1/16 chip.
>SFN-SFN Drift Rate	M		INTEGER (-100..+100)	Indicates the SFN-SFN drift rate in 1/256 chip per second. A positive value indicates that the Reference cell clock is running at a greater frequency than the measured neighbouring cell.
>SFN-SFN Drift Rate Quality	M		INTEGER_(0..100)	Indicates the standard deviation of the SFN-SFN drift rate measurements in 1/256 chip per second.
->SFN-SFN Measurement Time Stamp	M		9.2.1.53D	
Unsuccessful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information		0..maxno MeasNCell -1>0..maxno MeasNCell		
>UC-Id	M		9.2.1.65B	

Range bBound	Explanation
<i>maxnoMeasNCell</i>	Maximum number of neighbouring cells that can be measured on.

9.2.1.53F SFN-SFN Value

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
CHOICE Mode				
>FDD>FDD				
>>SFN-SFN	M		INTEGER_(0..614399)	According to mapping in [22].
>TDD>TDD				
>>SFN-SFN	M		INTEGER_(0..40961)	According to mapping in [23].

9.2.1.54 SIB Deletion Indicator

Void.

9.2.1.55 SIB Originator

Indicates if the Node B shall fill in the SIB information or not.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
SIB Originator			Enumerated ENUMERATED_RATED (Node B, CRNC, ...)	

9.2.1.56 Shutdown Timer

The shutdown timer shall indicate the length of time available to the CRNC to perform the block of a resource when a Normal priority block is requested.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
Shutdown Timer			INTEGER (1..3600); INTEGER(1..3600)	Unit: Value in seconds

9.2.1.56A T_RLFAILURE

The Radio Link Failure procedure shall be triggered after a period of time T_RLFAILURE has elapsed with a persisting out-of-sync indication (see also ref. [10] and [21]).

Information Element/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
T_RLFAILURE			ENUMERATED_INTEGER (0..0.4; 0.2; ..25.5)	Unit: In seconds Range: 0 .. 25.5 s Step: 0.1 s

9.2.1.56B Start Of Audit Sequence Indicator

Indicates if the AUDIT REQUEST message initiates a new audit sequence or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics & Description
Start Of Audit Sequence Indicator			ENUMERATED_ (sStart oOf aAudit sSequence, nNot sStart oOf aAudit sSequence)	

9.2.1.57 TFCI Presence

The TFCI Presence parameter indicates whether the TFCI shall be included. In TDD_s if it is present in the timeslot, it will be included within the first Channelization code listed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics & Description
TFCI presence			ENUMERATED (Present, nNot pPresent)	

9.2.1.58 TFCS (Transport Format Combination Set)

The Transport Format Combination Set is defined as a set of Transport Format Combinations on a Coded Composite Transport Channel. It is the allowed Transport Format Combinations of the corresponding Transport Channels. The DL Transport Format Combination Set is applicable for DL Transport Channels.

[FDD - Where the UE is assigned access to one or more DSCH transport channels then the UTRAN has the choice of two methods for signalling the mapping between TFCI(field 2) values and the corresponding TFC:

Method #1 - TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given transport format combination (value of CTFC(field2)). The CTFC(field2) value specified in the first group applies for all values of TFCI(field 2) between 0 and the specified 'Max TFCI(field2) value'. The CTFC(field2) value specified in the second group applies for all values of TFCI(field 2) between the 'Max TFCI(field2) value' specified in the last group plus one and the specified 'Max TFCI(field2) value' in the second group. – The process continues in the same way for the following groups with the TFCI(field 2) value used by the UE in constructing its mapping table starting at the largest value reached in the previous group plus one.

Method #2 - Explicit

The mapping between TFCI(field 2) value and CTFC(field2) is spelt out explicitly for each value of TFCI (field2)]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
CHOICE DSCH >No split in TFCI				This choice is made if : a) The TFCS refers to the Uplink. OR b) The mode is FDD and none of the Radio Links of the concerned UE are assigned any DSCH transport channels. OR c) The mode is TDD.
>>TFCS		1..<maxno ofTFCs>+1 to <maxno of TFCs>		The first instance of the parameter corresponds to TFCI zero, the second to 1 and so on.
>>>CTFC	M		9.2.1.18AINTEGER (0..MaxCTFC)	See Note 1.
>>>CHOICE Gain Factors	C-PhysChan			
>>>>Signalled Gain Factors				
>>>>CHOICE Mode	M			
>>>>>FDD				
>>>>>Gain Factor β_c	M		Integer-INTEGER (0..15)	For UL DPCCH or control part of PRACH or control part of PCPCH in FDD; mapping in accordance to [9]
>>>>>Gain Factor β_d	M		Integer-INTEGER (0..15)	For UL DPDCH or data part of PRACH or data part of PCPCH in FDD; mapping in accordance to [9]
>>>>>TDD				
>>>>>Gain Factor β	M		Integer-INTEGER (0..15)	For UL DPCH in TDD; mapping in accordance to [20].
>>>>>Reference TFC nr	O		Integer-INTEGER (0..3)	If this TFC is a reference TFC, this IE indicates the reference number.
>>>>>Computed Gain Factors				
>>>>>Reference TFC nr	M		Integer-INTEGER (0..3)	Indicates the reference TFC to be used to calculate the gain factors for this TFC.
>There is a split in the TFCI				This choice is made if : a) The TFCS refers to the Downlink. AND b) The mode is FDD and one of the Radio Links of the concerned UE is assigned one or more DSCH transport channels.
>>>>Transport Format Combination _{DCH}		1..<maxTFCI 1 Combs>+1 to <MaxTFCI 1 Combs>		The first instance of the parameter Transport Format Combination _{DCH} corresponds to TFCI (field 1) = 0, the second to TFCI (field 1) = 1 and so on.
>>>CTFC(field1)	M		9.2.1.18AInteger(0..MaxCTFC)	See Note 1.
>>Choice CHOICE				

<i>Signalling mMethod</i>				
<i>>>>>> TFCI fRange</i>				
<i>>>>>>>> TFC mMapping eOn DSCH</i>		<i>1..<maxNo TFCIGroups></i>		
<i>>>>>> Max TFCI(field2) vValue</i>	M		<i>IntegerINTEGER (1..1023)</i>	This is the Maximum value in the range of <i>_TFCI(field2)</i> values for which the specified CTFC(field2) applies
<i>>>>>> CTFC(field2)</i>	M		<i>9.2.1.18A Integer(0.. MaxCTFC)</i>	<i>See Note 1.</i>
<i>>>>>>>> Explicit</i>				
<i>>>>>>>> Transport fFormat eCombination_ DSCH</i>		<i>1..<maxTF CI 2 Combs></i>		The first instance of the parameter <i>Transport fFormat eCombination_ DSCH</i> corresponds to TFCI (field2) = 0, the second to TFCI (field 2) = <i>-1</i> and so on.
<i>>>>>> CTFC(field2)</i>	M		<i>9.2.1.18A Integer(0.. MaxCTFC)</i>	<i>See Note 1.</i>

Condition	Explanation
PhysChan	The IE shall be present if the TFCS concerns a UL DPCH or PRACH channel [FDD – <i>or</i> PCPCH channel].

Range bBound	Explanation
<i>maxnoofTFCsMaxnoofTFCs</i>	The maximum number of Transport Format Combinations.
<i>maxTFCI_1_CombsMaxTFCI_1_Combs</i>	Maximum number of TFCI (field 1) combinations (given by 2 raised to the power of the length of the TFCI (field 1))
<i>maxTFCI_2_CombsMaxTFCI_2_Combs</i>	Maximum number of TFCI (field 2) combinations (given by 2 raised to the power of the length of the TFCI (field 2))
<i>maxNoTFCIGroupsMaxNoTFCIGroups</i>	Maximum number of groups, each group described in terms of a range of TFCI(field 2) values for which a single value of CTFC(field2) applies
<i>MaxCTFC</i>	Maximum number of the CTFC value is calculated according to the following: $\sum_{i=1}^L (L_i - 1) P_i$ with the notation according to ref. [18]

Note 1:

The CTFC is an integer number calculated in accordance with [18], subclause 14.10. Regarding the channel ordering, for all transport channels, “TrCH1” corresponds to the transport channel having the lowest transport channel identity among all configured transport channels on this CCTrCH. “TrCH2” corresponds to the transport channel having the next lowest transport channel identity, and so on.

9.2.1.59 Transport Format Set

The Transport Format Set is defined as the set of Transport Formats associated to a Transport Channel, e.g. DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Dynamic Transport Format Information		$1..<maxTFcount>+1$ $<maxTFcount>$		The first instance of the parameter corresponds to TFI zero, the second to 1 and so on.
>Number Of Transport Blocks	M		INTEGER (0..512)	
>Transport Block Size	C- Blocks		INTEGER (0..5000)	Unit: Bits
>CHOICE Mode	M			
>>>> TDD				
>>>>> Transmission Time Interval Information	C-TTIdynamic	$1..<maxTTIcount>+1$ $<maxTTIcount>$		
>>>> Transmission Time Interval	M		Enumerated ENUMERATED RATED (10, 20, 40, 80,...)	Unit: ms
Semi-Static Transport Format Information		1		
>Transmission Time Interval	M		ENUMERATED (10, 20, 40, 80, dynamic,...,5)	Unit: ms; Value "dynamic" for TDD only; Value "5" for LCR TDD only
>Type Of Channel Coding	M		ENUMERATED_ (No codingTDD, Convolutional, Turbo, ...)	[FDD - The value "No codingTDD" shall be treated as logical error if received]
>Coding Rate	C- Coding		ENUMERATED (1/2, 1/3,...)	
>Rate Matching Attribute	M		INTEGER (1..maxRM)	
>CRC Size	M		ENUMERATED (0, 8, 12, 16, 24,...)	
>CHOICE Mode	M			
>>>> TDD				
>>>> 2 nd Interleaving Mode	M		Enumerated ENUMERATED RATED_ (Frame related, Timeslot related, ...)	

Condition	Explanation
Blocks	The IE shall be present if the <i>Number Of Transport Blocks</i> IE is set to a value greater than 0.
Coding	The IE shall be present if the <i>Type Of Channel Coding</i> IE is set to "Convolutional" or "Turbo".
-TTIdynamic	The IE shall be present if the <i>Transmission Time Interval</i> IE in the <i>Semi-Static Transport Format Information</i> IE is set to "dynamic".

Range Bound	Explanation
$maxTFcount$ / $MaxTFcount$	Maximum number of different <i>Transport Formats</i> that can be included in the <i>Transport Format Set</i> for one transport channel.
$MmaxRM$	Maximum number that could be set as rate matching attribute for a transport channel.
$MmaxTTIcount$	The amount of different <i>TTIs</i> that are possible for that <i>Transport Format</i> .

9.2.1.60 ToAWE

TOAWE is the window endpoint. DL data frames are expected to be received before this window endpoint. TOAWE is defined with a positive value relative Latest Time of Arrival (LTOA). A data frame arriving after TOAWE gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWE			INTEGER (0..2559)	Unit: ms.

9.2.1.61 ToAWS

TOAWS is the window startpoint. DL data frames are expected to be received after this window startpoint. TOAWS is defined with a positive value relative Time of Arrival Window Endpoint (TOAWE). A data frame arriving before TOAWS gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWS			INTEGER (0..1279)	Unit: ms.

9.2.1.62 Transaction ID

The transaction ID is used to associate all the messages belonging to the same procedure. Messages belonging to the same procedure shall use the same transaction ID.

The transaction ID is determined by the initiating peer of a procedure. For common procedures the transaction ID shall uniquely identify a procedure within all ongoing parallel procedures initiated by one protocol peer, using the same procedure code and signalled over the same Node B eControl pPort. For dedicated procedures the transaction ID shall uniquely identify a procedure within all ongoing parallel procedures initiated by one protocol peer, using the same procedure code and initiated towards the same Node B/CRNC context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Transaction ID Length Transaction ID			CHOICE INTEGER(0..127) or INTEGER (0..32767)	The Transaction ID shall be interpreted for its integer value, not for the type of encoding ("short" or "long").
>Short				
>>Transaction ID Value	M		INTEGER (0..127)	
>Long				
>>Transaction ID Value	M		INTEGER (0..32767)	

9.2.1.62A Transport Bearer Request Indicator

Indicates whether a new transport bearer needs to be established for carrying the concerning concerned transport channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Request Indicator			ENUMERATED_(Bearer Requested, Bearer Not Requested, ...)	

9.2.1.63 Transport Layer Address

The Transport Layer Address defines the transport address of the Node B. For details on the Transport Address used see ref. [2].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Layer Address			Bit string BIT STRING (1..160, ...)	

9.2.1.64 TSTD Indicator

Indicates if TSTD shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSTD Indicator			ENUMERATED_(active, inactive)	

9.2.1.64A T_{UTRAN-GPS} Measurement Value Information

The T_{UTRAN-GPS} Measurement Value Information IE indicates the measurement results related to the UTRAN GPS Timing of Cell Frames for LCS UE Positioning measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T _{UTRAN-GPS}		11		Indicates the UTRAN GPS Timing of Cell Frames for LCS UE Positioning. According to mapping in [22]. Significant values range from 0 to 37158911999999.
>MS	M		INTEGER (0..16383)	Most Significant Part
>LS	M		INTEGER (0..4294967295)	Least Significant Part
T _{UTRAN-GPS} _Quality	M		INTEGER_(0..255)	Indicates the standard deviation of the T _{UTRAN-GPS} measurements in 1/16 chip.
T _{UTRAN-GPS} Drift Rate	M		INTEGER_(-50..+50)	Indicates the T _{UTRAN-GPS} drift rate in 1/256 chip per second. A positive value indicates that the UTRAN clock is running at a lower frequency than GPS clock.
T _{UTRAN-GPS} Drift Rate Quality	M		INTEGER_(0..50)	Indicates the standard deviation of the T _{UTRAN-GPS} drift rate measurements in 1/256 chip per second.

9.2.1.64B T_{UTRAN-GPS} Measurement Threshold Information

The T_{UTRAN-GPS} Measurement Threshold Information defines the related thresholds for UTRAN GPS Timing of Cell Frames for LCS UE Positioning measurements shall trigger the event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T _{UTRAN-GPS} Change Limit	O		INTEGER_(1..256)	Change of T _{UTRAN-GPS} value compared to previously reported value, which shall trigger a new report. Unit: in 1/16 chip. Step: 1/16 chip
Predicted T _{UTRAN-GPS} Deviation Limit	O		INTEGER_(1..256)	Deviation of the predicated T _{UTRAN-GPS} from the latest measurement result, which shall trigger a new report. Unit: in 1/16 chip. Step: 1/16 chip

9.2.1.64C T_{UTRAN-GPS} Accuracy Class

The ~~T_{UTRAN-GPS} Accuracy Class~~ T_{UTRAN-GPS} Accuracy Class IE indicates the accuracy class of the UTRAN GPS Timing of Cell Frames for LCS UE Positioning measurement.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T _{UTRAN-GPS} Accuracy Class			ENUMERATED_(Accuracy Class A, Accuracy Class B, Accuracy Class C, ...)	More information about T _{UTRAN-GPS} Measurement Accuracy Class is included in [22].

9.2.1.65 UARFCN

Designates the central frequency of the channel number.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
UARFCN			INTEGER (0..16383, ...)	Unit: MHz Range: corresponds to 0..3276.6 MHz Step: 0.2 MHz (subclause 5.4.3 in [14] and [15])

9.2.1.65A UL Capacity Credit

The capacity credit indicates to the CRNC the Uplink capacity of a Local Cell or a Local Cell Group.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Capacity Credit			INTEGER (0..65535)	

9.2.1.65B UTRAN Cell Identifier (UC-Id)

The UC-Id (UTRAN Cell identifier) is the identifier of a cell in one UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RNC-Id	M		9.2.1.53a	
C-Id	M		9.2.1.9	

9.2.1.66 UL FP Mode

This parameter defines if normal or silent mode of the Frame Protocol shall be used for the UL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL FP Mode			ENUMERATED (Normal, Silent, ...)	

9.2.1.67 UL interference level

Void.

9.2.1.67A UL SIR

The UL SIR indicates a received UL SIR.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL SIR			ENUMERATED (-8.2...-17.3)	Step 0.1 dB

9.2.2 FDD specific parameters

9.2.2.A Active Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence activation. For details see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CM Configuration Change CFN	M		CFN 9.2.1.7	
Transmission Gap Pattern Sequence Status		$0..<maxT_{GPS}>0$ to $<MaxTGP_{S}>$		
>TGPS Identifier	M		Integer INTEGER (1..<MmaxTGPS>)	If the group is not present, none of the pattern sequences are activated. References an already defined sequence.
>TGPRC	M		Integer INTEGER (0..511)	The number of transmission gap patterns within the Transmission Gap Pattern Sequence. "0"=Infinity
>TGCFN	M		CFN 9.2.1.7	Connection Frame Number of the first frame of the first pattern 1 within the Transmission Gap Pattern Sequence.

Range Bound	Explanation
$maxTGP_{S}MaxTGPS$	Maximum number of active pattern sequences. Value 6.

9.2.2.B Adjustment Period

The *Adjustment Period* IE defines the period to be used for power balancing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Period			INTEGER (1..256)	Unit: Frames

9.2.2.C Adjustment Ratio

The *Adjustment Ratio* IE (*Radj*) defines the convergence rate used for the associated Adjustment Period.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Ratio			INTEGER (0..100)	Unit: None Range: 0..1 Step: 0.01 The Adjustment Ratio is given with a granularity of 0.01 0 -> 0.00 1 -> 0.01 ... 100 -> 1.00

9.2.2.D AICH Power

The *AICH Power* IE indicates a power level (measured as the power per transmitted acquisition indicator when several AIs are transmitted in parallel) relative to the primary CPICH power configured in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AICH Power			INTEGER (-22..+5)	Unit: Offset in dB Range: -22 .. +5 dB Step: 1 dB

9.2.2.1 AICH Transmission Timing

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AICH Transmission Timing			ENUMERATED (0, 1)	See parameter AICH_Transmission_Timing in ref. [7].

9.2.2.1A AP Preamble Signature

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AP Preamble Signature			INTEGER (0..15)	Described in ref. [9]

9.2.2.1B AP Sub Channel Number

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AP Sub Channel Number			INTEGER (0..11)	Described in ref. [10]

9.2.2.1C CD Sub Channel Numbers

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
CD Sub Channel Numbers			BIT STRING (12)	Each bit indicates availability for a subchannel, where the subchannels are numbered "subchannel 0" to "subchannel 11". The value 1 of a bit indicates that the corresponding subchannel is available and the value 0 indicates that it is not available. The order of bits is to be interpreted according to subclause 9.3.4. See also [10].

9.2.2.1D Channel Assignment Indication

The Channel Assignment Indication indicates whether CA is active or inactive. When CA is active, CPCH is in Versatile Channel Assignment Method (VCAM) mode and when CA is inactive, CPCH is in UE Channel Selection Method (UCSM) mode. In VCAM mode (CA active), CA message in CD/CA-ICH shall be sent.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Channel Assignment Indication			ENUMERATED (CA Active, CA Inactive)	

9.2.2.2 Chip Offset

The Chip Offset is defined as the radio timing offset inside a radio frame. The Chip offset is used as offset for the DL DPCH relative to the Primary CPICH timing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Chip Offset			INTEGER (0..38399)	Unit: Chips

9.2.2.2A Closed Loop Timing Adjustment Mode

Indicates when the phase/amplitude adjustment is performed in the DL in relation to the receipt of the UL feedback command in case of closed loop mode transmit diversity on DPCH.

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Closed Loop Timing Adjustment Mode			ENUMERATED (Offset1, Offset2, ...)	According to ref. [10] subclause 7.1: - "Offset1" = slot(j+1) mod 15 - "Offset2" = slot(j+2) mod 15

9.2.2.3 Common Channels Capacity Consumption Law

Void

9.2.2.3A Compressed Mode Deactivation Flag

The Compressed Mode Deactivation Flag indicates whether Compressed Mode shall be deactivated or not in the new RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Compressed Mode Deactivation Flag			ENUMERATED_(Deactivate, Maintain Active)	

9.2.2.4 Compressed Mode Method

Void.

9.2.2.4A CPCH Allowed Total Rate

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CPCH Allowed Total Rate			ENUMERATED (15, 30, 60, 120, 240, 480, 960, 1920, 2880, 3840, 4800, 5760,...)	Channel Symbol Rate (Unit: kbps)

9.2.2.4B CPCH Scrambling Code Number

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CPCH Scrambling Code Number			INTEGER (0..79)	Described in ref. [9]

9.2.2.4C CPCH UL DPCCH Slot Format

Indicates the slot format used in UL CPCH message control part, accordingly to ref. [7]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CPCH UL DPCCH Slot Format			INTEGER (0..2,...)	

9.2.2.4D DCH FDD Information

The *DCH FDD Information* IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Descriptions
DCH FDD Information		<i>1..<maxno ofDCHs>1 to <maxno of DCHs></i>		
>Payload CRC Presence Indicator	M		9.2.1.49	
>UL FP \uparrow Mode	M		9.2.1.66	
>ToAWS	M		9.2.1.61	
>ToAWE	M		9.2.1.60	
>DCH Specific Info		<i>1..<maxno ofDCHs></i>		
>>DCH ID	M		9.2.1.20	
>>Transport Format Set	M		9.2.1.59	For UL
>>Transport Format Set	M		9.2.1.59	For DL
>>Allocation/Retention Priority	M		9.2.1.1A	
>>Frame Handling Priority	M		9.2.1.30	
>>QE-Selector	M		9.2.1.50A	

Range \uparrow Bound	Explanation
<i>Mmaxno ofDCHs</i>	Maximum number of DCHs for one UE.

9.2.2.4E DCHs FDD \uparrow To Modify

The *DCHs FDD \uparrow To Modify* IE provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Descriptions
DCHs FDD \uparrowTo Modify		<i>1..<maxno ofDCHs></i>		
>UL FP Mode	O		9.2.1.66	
>ToAWS	O		9.2.1.61	
>ToAWE	O		9.2.1.60	
>Transport Bearer Request Indicator	M		9.2.1.62A	
>DCH Specific Info		<i>1..<maxno ofDCHs></i>		
>>DCH ID	M		9.2.1.20	
>>Transport Format Set	O		9.2.1.59	For the UL.
>>Transport Format Set	O		9.2.1.59	For the DL.
>>Allocation/Retention Priority	O		9.2.1.1A	
>>Frame Handling Priority	O		9.2.1.20	

Range \uparrow Bound	Explanation
<i>Mmaxno ofDCHs</i>	Maximum number of DCHs for one UE.

9.2.2.5 D-Field Length

Void.

9.2.2.6 Dedicated Channels Capacity Consumption Law

Void

9.2.2.7 Diversity Control Field

Void.

9.2.2.8 Diversity Indication

Void.

9.2.2.9 Diversity mode

Define the diversity mode to be applied.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Diversity Mode			ENUMERATED_(None, STTD, Closed loop mode 1, Closed loop mode_2, ...)	

9.2.2.10 DL DPCH Slot Format

Indicates the slot format used in DPCH in DL, accordingly to ref. [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL DPCH Slot Format			INTEGER (0..16,...)	

9.2.2.11 DL frame type

Void.

9.2.2.12 DL or Global Capacity Credit

Void

9.2.2.12A DL_power_averaging_window_size

The *DL_power_averaging_window_size* IE defines the window size when Limited Power Increase is used [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL_power_averaging_window_size			INTEGER (1..60)	Unit: 1-60 inner loop power adjustments. Range: 1..60 Step-size: 1 adjustment

9.2.2.13 DL Scrambling Code

DL scrambling code to be used by the RL. One cell may have multiple DL scrambling codes available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Scrambling Code			INTEGER (0..15)	"0" = Primary scrambling code of the cell "1".."15" = Secondary scrambling code

9.2.2.13A DL TPC Pattern 01 Count

The DL TPC Pattern 01 Count IE contains the value of the parameter n, which is used for determining the DL TPC pattern on Radio Links marked with "first RLS" by the First RLS indicator IE before UL synchronisation is achieved.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL TPC Pattern 01 Count			INTEGER(0..30,...)	

9.2.2.13B DSCH FDD Information

The DSCH FDD Information IE provides information for DSCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
DSCH FDD Information		<i>1..<maxno of DSCHs> 1 to <maxno of DSCHs></i>		
>DSCH ID	M		9.2.1.27	
>Transport Format Set	M		9.2.1.59	For DSCH
>Allocation/Retention Priority	M		9.2.1.1A	
>Frame Handling Priority	M		9.2.1.30	
>ToAWS	M		9.2.1.61	
>ToAWE	M		9.2.1.60	

Range Bound	Explanation
<i>Mmaxno of DSCHs</i>	Maximum number of DSCHs for one UE.

9.2.2.13C DPC Mode

The DPC Mode IE indicates the DPC mode to be applied [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPC Mode			ENUMERATED (Mode0, Mode1, ...)	"Mode0": The Node B shall estimate the UE transmitted TPC command and update the DL power in every slot "Mode1": The Node B shall estimate the UE transmitted TPC command over three slots and shall update the DL power in every three slots

9.2.2.13D DSCH FDD Common Information

The DSCH Common Information includes common information for all DSCHs for one UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH PC Indicator	O		9.2.2.13G	
Enhanced DSCH PC	C-EDSCHPC On		9.2.2.13E	

Condition	Explanation
EDSCHPCOn	The IE shall be present if the <i>Enhanced DSCH PC_Indicator</i> IE is set to "Enhanced DSCH PC Active in the UE".

9.2.2.13E Enhanced DSCH PC

The Enhanced DSCH PC includes all the parameters which are needed for DSCH power control improvement during soft handover.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH PC Wnd	M		9.2.2.13H	
Enhanced DSCH PC Counter	M		9.2.2.13F	
Enhanced DSCH Power Offset	M		9.2.2.13I	

9.2.2.13F Enhanced DSCH PC Counter

The Enhanced DSCH PC Counter parameter gives the number of correct cell ID command to receive in the averaging window, *Enhanced DSCH PC Wnd* IE, see ref. [10] subclause 5.2.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH PC Counter			INTEGER(1..50)	

9.2.2.13G Enhanced DSCH PC Indicator

The Enhanced DSCH PC Indicator indicates whether Enhanced DSCH PC is in use by the UE or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH PC Indicator			ENUMERATED(Enhanced DSCH PC Active in the UE, Enhanced DSCH PC not Active in the UE)	

9.2.2.13H Enhanced DSCH PC Wnd

The Enhanced DSCH PC Wnd parameter shows the window size to decide primary or non-primary cell, see ref. [10] subclause 5.2.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH PC Wnd			INTEGER(1..10)	

9.2.2.13I Enhanced DSCH Power Offset

The Enhanced DSCH Power Offset parameter gives the power offset to be added on DSCH when cell is decided to be primary.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH Power Offset			INTEGER_(-15..0)	Unit: dB Range: -15..0 dB Step: 1 dB

9.2.2.14 FDD DL Channelisation Code Number

The DL Channelisation Code Number indicates the DL Channelisation Code number for a specific DL physical channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD DL Channelisation Code Number			INTEGER_(0..511)	According to the mapping in [9]. The maximum value is equal to the DL spreading factor -1.

9.2.2.14A FDD DL Code Information

The *FDD DL Code Information* IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
FDD DL Code Information		$1..<maxno\ of\ Codes>1$ to $<maxno\ of\ Codes>$		
>DL Scrambling Code	M		9.2.2.13	
>FDD DL Channelisation Code Number	M		9.2.2.14	
>Transmission Gap Pattern Sequence Code Information	O		9.2.2.53B	

Range Bound	Explanation
$Mmaxno\ of\ Codes$	Maximum number of DL code information.

9.2.2.15 FDD SCCPCH Offset

The Secondary CCPCH offset is defined as the time offset towards the Primary CCPCH in the cell. The offset is a multiple of 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD SCCPCH Offset			INTEGER_(0..149)	Unit: 0-chip 1- 256 chip 2- 512 chip 3- 768 chip 4- 1024 chip 5- 1280 chip 6- 1536 chip 7- 1792 chip 8- 2048 chip 9- 2304 chip 10- 2560 chip 11- 2816 chip 12- 3072 chip 13- 3328 chip 14- 3584 chip 15- 3840 chip 16- 4096 chip 17- 4352 chip 18- 4608 chip 19- 4864 chip 20- 5120 chip 21- 5376 chip 22- 5632 chip 23- 5888 chip 24- 6144 chip 25- 6400 chip 26- 6656 chip 27- 6912 chip 28- 7168 chip 29- 7424 chip 30- 7680 chip 31- 7936 chip 32- 8192 chip 33- 8448 chip 34- 8704 chip 35- 8960 chip 36- 9216 chip 37- 9472 chip 38- 9728 chip 39- 9984 chip 40- 10240 chip 41- 10496 chip 42- 10752 chip 43- 11008 chip 44- 11264 chip 45- 11520 chip 46- 11776 chip 47- 12032 chip 48- 12288 chip 49- 12544 chip 50- 12800 chip 51- 13056 chip 52- 13312 chip 53- 13568 chip 54- 13824 chip 55- 14080 chip 56- 14336 chip 57- 14592 chip 58- 14848 chip 59- 15104 chip 60- 15360 chip 61- 15616 chip 62- 15872 chip 63- 16128 chip 64- 16384 chip 65- 16640 chip 66- 16896 chip 67- 17152 chip 68- 17408 chip 69- 17664 chip 70- 17920 chip 71- 18176 chip 72- 18432 chip 73- 18688 chip 74- 18944 chip 75- 19200 chip 76- 19456 chip 77- 19712 chip 78- 19968 chip 79- 20224 chip 80- 20480 chip 81- 20736 chip 82- 20992 chip 83- 21248 chip 84- 21504 chip 85- 21760 chip 86- 22016 chip 87- 22272 chip 88- 22528 chip 89- 22784 chip 90- 23040 chip 91- 23296 chip 92- 23552 chip 93- 23808 chip 94- 24064 chip 95- 24320 chip 96- 24576 chip 97- 24832 chip 98- 25088 chip 99- 25344 chip 100- 25600 chip 101- 25856 chip 102- 26112 chip 103- 26368 chip 104- 26624 chip 105- 26880 chip 106- 27136 chip 107- 27392 chip 108- 27648 chip 109- 27904 chip 110- 28160 chip 111- 28416 chip 112- 28672 chip 113- 28928 chip 114- 29184 chip 115- 29440 chip 116- 29696 chip 117- 29952 chip 118- 30208 chip 119- 30464 chip 120- 30720 chip 121- 30976 chip 122- 31232 chip 123- 31488 chip 124- 31744 chip 125- 32000 chip 126- 32256 chip 127- 32512 chip 128- 32768 chip 129- 33024 chip 130- 33280 chip 131- 33536 chip 132- 33792 chip 133- 34048 chip 134- 34304 chip 135- 34560 chip 136- 34816 chip 137- 35072 chip 138- 35328 chip 139- 35584 chip 140- 35840 chip 141- 36096 chip 142- 36352 chip 143- 36608 chip 144- 36864 chip 145- 37120 chip 146- 37376 chip 147- 37632 chip 148- 37888 chip 149- 38144 chip See ref. [7]

9.2.2.16 FDD TPC DL Step Size

This parameter indicates step size for the DL power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD TPC Downlink Step Size			ENUMERATED (0.5, 1, 1.5, 2,...)	UnitStep: dB

9.2.2.16A First RLS Indicator

The *First RLS Indicator* IE indicates if a specific Radio Link and all Radio Links which are part of the same Radio Link Set, shall be considered as the first radio links established towards the UE or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
First RLS Indicator			ENUMERATED (First RLS, Not First RLS)	

9.2.2.17 Gap Period

Void.

9.2.2.18 Gap Position Mode

Void.

9.2.2.18A Limited Power Increase

The parameter is used for a more efficient use of the inner loop DL power control for non real time data.

If the limited power increase is used, the Node B shall use the limited power increase algorithm as specified in [10], subclause 5.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Limited Power Increase			ENUMERATED (Used, Not Used)	

9.2.2.18B Inner Loop DL PC Status

The *Inner Loop DL PC Status* IE indicates whether inner loop DL control shall be active or inactive for all radio links associated with the context identified by the *Node B Communication Context Id* IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Inner Loop DL PC Status			ENUMERATED (Active, Inactive)	

9.2.2.18C IPDL FDD Parameters

The *IPDL FDD Parameters* IE provides information about IPDL to be applied for FDD when activated.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IP Spacing FDD	M		ENUMERATED (5, 7, 10, 15, 20, 30, 40, 50, ...)	See [10]
IP Length	M		ENUMERATED (5, 10)	See [10]
Seed	M		INTEGER (0..63)	See [10]
Burst Mode Parameters	O		9.2.1.5A	

9.2.2.19 Max Adjustment Period

Void.

9.2.2.20 Max Adjustment Step

Defines the maximum allowed value for the change of DL power level during a certain number of slots that can be utilised by the downlink power balancing algorithm. *Max Adjustment Step* IE defines a time period, in terms of number of slots, in which the accumulated power adjustment shall be maximum 1dB. This value does not include the DL inner loop PC adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Adjustment Step			INTEGER (1..10)	Unit: Slots

9.2.2.20A Max Number of PCPCHs

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Number of PCPCHs			INTEGER (1..64, ...)	

9.2.2.21 Maximum Number of UL DPDCHs

Maximum number of uplink DPDCHs to be used during the connection. Needed by the rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Number of UL DPDCHs			INTEGER (1..6)	

9.2.2.22 Minimum UL Channelisation Code Length

Minimum UL channelisation code length (spreading factor) of a DPDCH which is used during the connection. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Min UL Channelisation Code Length			ENUMERATED (4, 8, 16, 32, 64, 128, 256, ...)	

9.2.2.23 Multiplexing Position

Multiplexing Position specifies whether fixed or flexible positions of transport channels shall be used in the physical channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiplexing Position			ENUMERATED_(Fixed, Flexible)	

9.2.2.23A N_EOT

The N_EOT is defined as number of End of Transmission for release of PCPCH transmission.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_EOT			INTEGER (0..8)	Unit: TTI Value "8" is never used in this release.

9.2.2.23B NF_max

The NF_max is defined as maximum number of Frame in a PCPCH message data part.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
NF_max			INTEGER (1..64,...)	

9.2.2.23C N_Start_Message

The N_Start_Message is defined as number of Frames for start message of DL DPDCHeS for a CPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_Start_Message			INTEGER (1..8)	

9.2.2.24 Pattern Duration (PD)

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PD			INTEGER(0..2047, ...)	Frames If the value is set to '0', the Pattern Duration shall be interpreted as 'infinite'
Void.				

9.2.2.24A PCP Length

Indicates CPCH power control preamble length.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PCP Length			ENUMERATED (0, 8)	

9.2.2.25 PDSCH eCode mMapping

This IE indicates the association between each possible value of TFCI(field 2) and the corresponding PDSCH channelisation code(s). There are three fundamentally different ways that the UTRAN must choose between in order to signal the mapping information, these are described below. The signalling capacity consumed by the different methods

will vary depending on the way in which the UTRAN configures usage of the DSCH. A fourth option is also provided which allows the UTRAN to replace individual entries in the TFCI(field 2) to PDSCH code mapping table with new PDSCH code values.

Method #1 - Using code range

The mapping is described in terms of a number of groups, each group associated with a given spreading factor. Each TFCI(field2) value corresponds to a given PDSCH channelisation code or set of PDSCH codes for multi-code. The Node B maps TFCI(field2) values to PDSCH codes in the following way:

- The PDSCH codes used for TFCI(field 2) = 0 are given by the SF of the Code Group 1 (i.e. first instance in *PDSCH eCode mMapping*) and the code numbers between CodeNumber₀ (where CodeNumber₀ = "Start eCode nNumber" of Code Group 1) and CodeNumber₀ + "mMulti-eCode iInfo" - 1.
- This continues with unit increments in the value of TFCI (Field2) mapped to either unit increments in code numbers or groups of contiguous code numbers in case of multi-code, this until "Stop eCode nNumber" is reached:
So the PDSCH codes used for TFCI(field 2) = k (for k > 0 and k < ("Stop eCode nNumber" - "Start eCode nNumber" + 1) DIV k) are given by the SF of the Code Group 1 and the code numbers between CodeNumber_k = CodeNumber_{k-1} + "mMulti-eCode iInfo" and CodeNumber_k + "mMulti-eCode iInfo" - 1.
If "Stop eCode nNumber" = "Start eCode nNumber" + "mMulti-eCode iInfo" - 1 then this is to be interpreted as defining the mapping between the channelisation code(s) and a single TFCI.
- The Node B constructs its mapping table by repeating this process for all the Code Groups in the order they are instantiated in *PDSCH eCode mMapping*. The first TFCI(field 2) value used in each group is the largest TFCI(field 2) value reached in the previous group incremented by one.

Note: This imposes that "Stop eCode nNumber" - "Start eCode nNumber" + 1 is a multiple of the value "mMulti-eCode iInfo" for each instance of *PDSCH eCode mMapping*. Furthermore, in the case where multi-code is not used, then "mMulti-eCode iInfo" = 1 and the process above also applies.

Method #2 - Using TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given PDSCH channelisation code or codes for multicode.

- The set of PDSCH codes specified in the first instance applies for all values of TFCI(field 2) between 0 and the specified "Max TFCI(field2)".
- The process continues in the same way for the following groups with the TFCI(field 2) value starting at the largest value reached in the previous instance incremented by one.
So the set of PDSCH codes specified in a given instance apply for all the values of TFCI(field 2) between the "Max TFCI(field2) value" specified in the previous instance incremented by one and the specified "Max TFCI(field2)" of the considered instance.

A set of PDSCH codes is composed of all the codes between "Code Number" and "Code Number" + "Multi-Code Infomulticode" - 1. So if multi-code is not used, the set of PDSCH codes is reduced to one element indicated by the *Code Number* IE.

Method #3 - Explicit

The mapping between TFCI(field 2) value and PDSCH channelisation code (or a set of PDSCH codes for multicode) is spelt out explicitly for each value of TFCI (field2).

A set of PDSCH codes is composed of all the codes between "Code Number" and "Code Number" + "Multi-Code Infomulticode" - 1. So if multi-code is not used, the set of PDSCH codes is reduced to one element indicated by the *Code Number* IE.

Method #4 - Replace

The "TFCI (field2)" value(s) for which the mapping to PDSCH channelisation code (or a set of PDSCH codes for multicode) is changed are explicitly signalled. Furthermore, the new mapping between TFCI(field 2) value and PDSCH channelisation code(s) is spelt out explicitly for each value of TFCI (field2).

A set of PDSCH codes is composed of all the codes between "Code Number" and "Code Number" + "Multi-Code Info~~multicode~~" - 1. So if multi-code is not used, the set of PDSCH codes is reduced to one element indicated by the *Code Number* IE.

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Scrambling Code	M		INTEGER (0..15) 9.2.2.13	Scrambling code on which PDSCH is transmitted. 0 = Primary scrambling code of the cell 1...15 = Secondary scrambling code
CHOICE Signalling Method				
>> Code Range				
>>> PDSCH Code Mapping		1..<Mmax NoCodeGroups>		
>>> Spreading Factor	M		Enumerated ENUMERATED (4, 8, 16, 32, 64, 128, 256...)	
>>> Multi-Code Info	M		Integer INTEGER (1..16)	
>>> Start Code Number	M		Integer INTEGER (0..maxCodeNumComp-1)	PDSCH code start, Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>>> Stop Code Number	M		Integer INTEGER (0..maxCodeNumComp-1)	PDSCH code stop, Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>> TFCI Range				
>>> DSCH Code Mapping		1..<Mmax NoTFCIGroups>		
>>> Max TFCI(field2) Value	M		Integer INTEGER (1..1023)	This is the maximum value in the range of TFCI(field 2) values for which the specified PDSCH code applies
>>> Spreading Factor	M		Enumerated ENUMERATED (4, 8, 16, 32, 64, 128, 256...)	SF of PDSCH code
>>> Multi-Code Info	M		Integer INTEGER (1..16)	
>>> Code Number	M		Integer INTEGER (0..maxCodeNumComp-1)	Code number of PDSCH code. Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>> Explicit				
>>> PDSCH Code		1..<Mmax TFCI_2_Combos>		The first instance of the parameter PDSCH code corresponds to TFCI (field2) = 0, the second to TFCI(field 2) = 1 and so on.
>>> Spreading Factor	M		Enumerated ENUMERATED (4, 8, 16, 32, 64, 128, 256...)	SF of PDSCH code
>>> Multi-Code Info	M		Integer INTEGER (1..16)	
>>> Code Number	M		Integer INTEGER (0..maxCodeNumComp-1)	Code number of PDSCH code. Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>> Replace				
>>> Replaced PDSCH Code		1..<maxTFCI 2 Combs>1..<Mmax		

		xTFCI_2_Combs		
>>>TFCI (field2)	M		IntegerINTEGER (0..1023)	Value of TFCI(field 2) for which PDSCH code mapping will be changed
>>>Spreading Factor	M		EnumeratedENUMERATED (4, 8, 16, 32, 64, 128, 256...)	SF of PDSCH code
>>>Multi-code info	M		IntegerINTEGER (1..16)	
>>>Code Number	M		IntegerINTEGER (0..maxCodeNumComp-1)	Code number of PDSCH code. Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.

Range Bound	Explanation
maxCodeNumCompMaxCodeNumComp	Maximum number of codes at the defined spreading factor, within the complete code tree.
maxTFCI_2_CombsMaxTFCI_2_Combs	Maximum number of TFCI (field 2) combinations (given by 2 raised to the power of the length of the TFCI field 2)
maxNoTFCIGroupsMaxNoTFCIGroups	Maximum number of groups, each group described in terms of a range of TFCI(field 2) values for which a single PDSCH code applies.
maxNoCodeGroupsMaxNoCodeGroups	Maximum number of groups, each group described in terms of a range of PDSCH channelisation code values for which a single spreading factor applies.

9.2.2.26 PICH Mode

The number of paging indicators (PIs) in a PICH frame.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PICH Mode			EnumeratedENUMERATED (18, 36, 72, 144...)	Number of PIs per frame

9.2.2.27 Power Adjustment Type

Defines the characteristic of the power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Adjustment Type			ENUMERATED (None, Common, Individual)	

9.2.2.28 Power Control Mode

Void.

9.2.2.29 Power Offset

This IE defines a power offset relative to the Downlink transmission power of a DPDCH or a Secondary CCPCH data field or a DL-DPCCH for CPCH pilot field..

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Offset			INTEGER (0..24)	Unit: dB Range: 0..6 dB Step: 0.25 dB, range 0-6 dB

9.2.2.29A Power_Raise_Limit

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power_Raise_Limit			INTEGER (0..10)	Unit: dB Range: 0..10 dB Step-size: 1 dB

9.2.2.30 Power Resume Mode

Void.

9.2.2.31 Preamble Signature

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Preamble Signatures			BIT STRING (16)	Each bit indicates availability for a signature, where the signatures are numbered "signature 0" up to "signature 15". The value 1 of a bit indicates that the corresponding signature is available and the value 0 that it is not available. The order of bits is to be interpreted according to subclause 9.3.4. See also [9].

9.2.2.32 Preamble Threshold

The IE sets the threshold for preamble detection. The ratio between received preamble power during the preamble period and interference level shall be above this threshold in order to be acknowledged.

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Preamble Threshold			INTEGER (0..72)	Unit: dB Range: 0..-36.0 dB Step1: -35.5 dB Step2: -35.0 dB Step3: -34.5 dB Step4: -34.0 dB Step5: -33.5 dB Step6: -33.0 dB Step7: -32.5 dB Step8: -32.0 dB Step9: -31.5 dB Step10: -31.0 dB Step11: -30.5 dB Step12: -30.0 dB Step13: -29.5 dB Step14: -29.0 dB Step15: -28.5 dB Step16: -28.0 dB Step17: -27.5 dB Step18: -27.0 dB Step19: -26.5 dB Step20: -26.0 dB Step21: -25.5 dB Step22: -25.0 dB Step23: -24.5 dB Step24: -24.0 dB Step25: -23.5 dB Step26: -23.0 dB Step27: -22.5 dB Step28: -22.0 dB Step29: -21.5 dB Step30: -21.0 dB Step31: -20.5 dB Step32: -20.0 dB Step33: -19.5 dB Step34: -19.0 dB Step35: -18.5 dB Step36: -18.0 dB Step37: -17.5 dB Step38: -17.0 dB Step39: -16.5 dB Step40: -16.0 dB Step41: -15.5 dB Step42: -15.0 dB Step43: -14.5 dB Step44: -14.0 dB Step45: -13.5 dB Step46: -13.0 dB Step47: -12.5 dB Step48: -12.0 dB Step49: -11.5 dB Step50: -11.0 dB Step51: -10.5 dB Step52: -10.0 dB Step53: -9.5 dB Step54: -9.0 dB Step55: -8.5 dB Step56: -8.0 dB Step57: -7.5 dB Step58: -7.0 dB Step59: -6.5 dB Step60: -6.0 dB Step61: -5.5 dB Step62: -5.0 dB Step63: -4.5 dB Step64: -4.0 dB Step65: -3.5 dB Step66: -3.0 dB Step67: -2.5 dB Step68: -2.0 dB Step69: -1.5 dB Step70: -1.0 dB Step71: -0.5 dB Step72: 0.0 dB

9.2.2.33 Primary CPICH Power

The Primary CPICH power is the power that shall be used for transmitting the P-CPICH in a cell. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CPICH power			Enumerated (-10, ..., 50)	Unit dBm Granularity 0.1 dB

9.2.2.34 Primary Scrambling Code

The Primary scrambling code to be used in the cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary Scrambling Code			Integer-INTEGER (0..511)	

9.2.2.35 Propagation Delay

The Propagation delay is the one-way propagation delay of the radio signal from the MS to the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Propagation Delay			INTEGER (0..255)	Unit: chips; Range: 0..765 chips; Step size is 3 chips; 0=0 chips; 1=3 chips, ...

9.2.2.36 QE-Selector

Void.

9.2.2.37 RACH Slot Format

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RACH Slot Format			ENUMERATED (0..3, ...)	See ref. [7].

9.2.2.38 RACH Sub Channel Numbers

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RACH Sub Channel Numbers			BIT STRING (12)	Each bit indicates availability for a subchannel, where the subchannels are numbered "subchannel 0" to "subchannel 11". The value 1 of a bit indicates that the corresponding subchannel is available and the value 0 indicates that it is not available. The order of bits is to be interpreted according to subclause 9.3.4.

9.2.2.39 RL Set ID

The RL Set ID uniquely identifies one RL Set within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL Set ID			INTEGER (0..31)	

9.2.2.39A Received ϵ Total w Wide b Band p Power

The Received total wide band power indicates the UL interference at a certain cell under CRNC, see ref. [4].

IE/Group Name	Presence	Range	IE ϵ Type and r Reference	Semantics d Description
Received ϵ Total w Wide b Band p Power			INTEGER_(0..621)	According to mapping in [22].

9.2.2.40 S-Field Length

The UE uses the S Field of the UL DPCCH slot to send the SS DT Cell ID to the network.

IE/Group Name	Presence	Range	IE ϵ Type and r Reference	Semantics d Description
S Field Length			ENUMERATED (1, 2,...)	

9.2.2.41 Scrambling Code Change

Void.

9.2.2.42 Scrambling Code Number

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Scrambling Code w ord Number			INTEGER (0..15)	Identification of scrambling code see ref. [9].

9.2.2.43 Secondary CCPCH Slot Format

IE/Group Name	Presence	Range	IE ϵ Type and r Reference	Semantics d Description
Secondary CCPCH Slot Format			INTEGER_(0..17,...)	

9.2.2.44 SS DT Cell Identity

The SS DT Cell ID is a temporary ID for SS DT assigned to a cell.

IE/Group Name	Presence	Range	IE ϵ Type and r Reference	Semantics d Description
SS DT Cell Identity			ENUMERATED (a, b,..., h)	

9.2.2.44A SS DT Cell Identity f For EDSCHPC

The SS DT Cell Identity for EDSCHPC is a temporary ID for enhanced DSCH power control assigned to a cell.

IE/Group Name	Presence	Range	IE ϵ Type and r Reference	Semantics d Description
SS DT Cell Identity f For EDSCHPC			SS DT Cell Identity 9.2.2.44	

9.2.2.45 SSdT Cell ID Length

The SSdT Cell ID Length parameter shows the length of the SSdT Cell ID.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell ID Length			ENUMERATED_(Short, Medium, Long)	

9.2.2.46 SSdT Support Indicator

The SSdT Support Indicator indicates whether a RL supports SSdT or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SSdT Support Indicator			ENUMERATED_(SSdT Supported, SSdT Not Supported)	

9.2.2.47 SSdT Indication

The SSdT Indication indicates whether SSdT is in use by the UE or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SSdT Indication			ENUMERATED_(SSdT Active in the UE, SSdT Not Active in the UE)	

9.2.2.48 STTD Indicator

Indicates if STTD shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
STTD Indicator			ENUMERATED_(active, inactive)	

9.2.2.49 T Cell

Timing delay used for defining start of SCH, CPICH and the DL scrambling code(s) in a cell relative BFN. Resolution 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T Cell			EnumeratedENUMERATED_RATED (0, 1,...,9)	Unit: 0 chip Step: 256 chips Range: 0..2304 chips Step: 256 chips See ref. [17]

9.2.2.49A TFCI2 Bearer Information Response

The *TFCI2 Bearer Information Response* IE provides information for TFCI2 bearer that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
Binding ID	M		9.2.1.4	
Transport Layer Address	M		9.2.1.63	

9.2.2.50 TFCI Signalling Mode

This parameter indicates if the normal or split mode is used for the TFCI. In the event that the split mode is to be used then the IE indicates whether the split is "Hard" or "Logical", and in the event that the split is "Logical" the IE indicates the number of bits in TFCI (field 2).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
TFCI Signalling Option	M		ENUMERATED (Normal, Split)	"Normal": meaning no split in the TFCI field (either "Logical" or "Hard") "Split": meaning there is a split in the TFCI field (either "Logical" or "Hard")
Split Type	C-IfSplit		Enumerated ENUMERATED (Hard, Logical)	"Hard": meaning that TFCI (field 1) and TFCI (field 2) are each 5 bits long and each field is block coded separately. "Logical": meaning that on the physical layer TFCI (field 1) and TFCI (field 2) are concatenated, field 1 taking the most significant bits and field 2 taking the least significant bits). The whole is then encoded with a single block code.
Length of TFCI2	C-SplitType		Integer-INTEGER (1..10)	This IE indicates the length measured in number of bits of TFCI (field2).

Condition	Explanation
IfSplit	The IE shall be present if the <i>TFCI Signalling Option</i> IE is set to "Split".
SplitType	The IE shall be present if the <i>Split Type</i> IE is set to "Logical".

9.2.2.51 TGD

Void.

9.2.2.52 TGL

Void.

9.2.2.53 Transmit Diversity Indicator

The Transmit Diversity Indicator indicates whether transmit diversity shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmit Diversity Indicator			ENUMERATED_(active, inactive)	

9.2.2.53A Transmission Gap Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence. For details see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Transmission Gap Pattern Sequence Information		$1..<maxTGPS>4$ to $<MaxTGPS>S$		
>TGPS Identifier	M		Integer INTEGER (1..<MmaxTGPS>)	Transmission Gap Pattern Sequence Identifier; Establish a reference to the compressed mode pattern sequence. Up to <MmaxTGPS> simultaneous compressed mode pattern sequences can be used.
>TGSN	M		Integer INTEGER (0..14)	Transmission Gap Starting Slot Number; The slot number of the first transmission gap slot within the TGCFN.
>TGL1	M		Integer INTEGER (1..14)	The length of the first Transmission Gap within the transmission gap pattern expressed in number of slots.
>TGL2	O		Integer INTEGER (1..14)	The length of the second Transmission Gap within the transmission gap pattern. If omitted, then TGL2=TGL1.
>TGD	M		Integer INTEGER (0, 15.. 269)	Transmission Gap Distance; indicates the number of slots between the starting slots of two consecutive transmission gaps within a transmission gap pattern. If there is only one transmission gap in the transmission gap pattern, this parameter shall be set to "0" ("0" =undefined).
>TGPL1	M		Integer INTEGER (1..144,...)	The duration of transmission gap pattern 1 in frames.
>TGPL2	O		Integer INTEGER (1..144,...)	The duration of transmission gap pattern 2 in frames. If omitted, then TGPL2=TGPL1.
>UL/DL Mode	M		Enumerated ENUMERATED (UL only, DL only, UL/DL)	Defines whether only DL, only UL, or combined UL/DL compressed mode is used.
>Downlink Compressed Mode Method	C-DL		Enumerated ENUMERATED (Puncturing, SF/2, Higher Layer Scheduling, ...)	Method for generating downlink compressed mode gap None means that compressed mode pattern is stopped.
>Uplink Compressed Mode Method	C-UL		Enumerated ENUMERATED (SF/2, Higher Layer Scheduling, ...)	Method for generating uplink compressed mode gap.
>Downlink Frame Type	M		Enumerated ENUMERATED (A, B,...)	Defines if frame structure type "A" or "B" shall be used in downlink compressed mode.
>DeltaSIR1	M		Integer INTEGER (0..30)	Delta in SIR target value to be set in the Node B during the frame containing the start of the first transmission gap in

				the transmission gap pattern (without including the effect of the bit-rate increase). Unit: dB Range: 0..3 dB Step: 0.1 dB, Range 0-3dB
>DeltaSIRafter1	M		Integer INTEGER (0..30)	Delta in SIR target value to be set in the Node B one frame after the frame containing the start of the first transmission gap in the transmission gap pattern. Unit: dB Range: 0..3 dB Step: 0.1 dB, Range 0-3dB
>DeltaSIR2	O		Integer INTEGER (0..30)	Delta in SIR target value to be set in the Node B during the frame containing the start of the second transmission gap in the transmission gap pattern (without including the effect of the bit-rate increase). When omitted, DeltaSIR2 = DeltaSIR1. Unit: dB Range: 0..3 dB Step: 0.1 dB, Range 0-3dB
>DeltaSIRafter2	O		Integer INTEGER (0..30)	Delta in SIR target value to be set in the Node B one frame after the frame containing the start of the second transmission gap in the transmission gap pattern. When omitted, DeltaSIRafter2 = DeltaSIRafter1. Unit: dB Range: 0..3 dB Step: 0.1 dB, Range 0-3dB

Condition	Explanation
UL	The IE shall be present if the <i>UL/DL mode</i> IE is set to "UL only" or "UL/DL".
DL	The IE shall be present if the <i>UL/DL mode</i> IE is set to "DL only" or "UL/DL".

Range bBound	Explanation
maxTGPSMaxTGPS	Maximum number of transmission gap pattern sequences.

9.2.2.53B Transmission Gap Pattern Sequence Code Information

This IE indicates whether the alternative scrambling code shall used for the Downlink compressed mode method or not in the Transmission Gap Pattern Sequence. For details see [189].

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
Transmission Gap Pattern Sequence Code InformationScrambling code change			Enumerated ENUMERATED (Code Change, No Code Change)	Indicates whether the alternative scrambling code is used for compressed mode method "SF/2".

9.2.2.54 UL/DL compressed mode selection:

Void.

9.2.2.55 UL delta SIR

Void.

9.2.2.56 UL delta SIR after

Void.

9.2.2.57 UL DPCCH Slot Format

Indicates the slot format used in DPCCH in UL, according to ref. [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
UL DPCCH Slot Format			INTEGER (0..5,...)	

9.2.2.58 UL SIR

Void

9.2.2.59 UL Scrambling Code

The UL Scrambling Code is the scrambling code used by UE. Every UE has its specific UL Scrambling Code.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
UL Scrambling Code Number	M		INTEGER (0.. $2^{24}-1$)	
UL Scrambling Code Length	M		ENUMERATED_ Short, Long)	

9.2.2.60 UL Capacity Credit

Void

9.2.3 TDD specific Parameters

9.2.3.1 Block STTD Indicator

Void.

9.2.3.2 Burst Type

Void.

9.2.3.3 CCTrCH ID

The CCTrCH ID for dedicated and shared channels identifies unambiguously an uplink or downlink CCTrCH inside a Radio Link. For S-CCPCH, it identifies unambiguously a downlink CCTrCH within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CCTrCH ID			INTEGER (0..15)	

9.2.3.4 Cell Parameter ID

The Cell Parameter ID identifies unambiguously the [3.84 Mcps TDD - Code Groups, Scrambling Codes, Midambles and Toffset] [1.28 Mcps TDD - SYNC-DL and SYNC-UL sequences, the scrambling codes and the midamble codes] (see ref. [20]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Parameter ID			INTEGER (0..127,...)	

9.2.3.4A Constant Value

The Constant Value is the power margin used by a UE to set the proper uplink power for a DCH, USCH, or a RACH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Constant Value			INTEGER (-10..10,...)	Unit: dB Range: -10 .. +10 dB Granularity Step: 1 dB.

9.2.3.4B DL Timeslot ISCP

The DL Timeslot ISCP is the measured interference in a downlink timeslot at the UE, see ref. [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Timeslot ISCP			INTEGER (0..91)	According to mapping in ref. [5].

9.2.3.4C DCH TDD Information

The *DCH TDD Information* IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \downarrow Descriptions
DCH TDD Information		<i>1..<maxno of DCHs>1 to <maxno of DCHs></i>		
>Payload CRC Presence Indicator	M		9.2.1.49	
>UL FP \uparrow Mode	M		9.2.1.66	
>ToAWS	M		9.2.1.61	
>ToAWE	M		9.2.1.60	
>DCH Specific Info		<i>1..<maxno of DCHs></i>		
>>DCH ID	M		9.2.1.20	
>>CCTrCH ID	M		9.2.3.3	UL CCTrCH in which the DCH is mapped
>>CCTrCH ID	M		9.2.3.3	DL CCTrCH in which the DCH is mapped
>>Transport Format Set	M		9.2.1.59	For UL
>>Transport Format Set	M		9.2.1.59	For DL
>>Allocation/Retention Priority	M		9.2.1.1A	
>>Frame Handling Priority	M		9.2.1.30	
>>QE-Selector	C-CoordDCH		9.2.1.50A	

Condition	Explanation
CoordDCH	The IE shall be present if this DCH is part of a set of coordinated DCHs (number of instances of the <i>DCH Specific Info</i> IE is greater than 1).

Range \downarrow Bound	Explanation
<i>Mmaxno of DCHs</i>	Maximum number of DCHs for one UE

9.2.3.4D DCHs TDD \uparrow To Modify

The *DCHs TDD \uparrow To Modify* IE provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE type and reference	Semantics descriptions	Criticality	Assigned Criticality
DCHs TDD to Modify		1..<maxno of DCHs>			GLOBAL	reject
>UL FP Mode	O		9.2.1.66			
>ToAWS	O		9.2.1.61			
>ToAWE	O		9.2.1.60			
>Transport Bearer Request Indicator	M		9.2.1.62A			
>DCH Specific Info		1..<maxno of DCHs>				
>>DCH ID	M		9.2.1.20			
>>CCTrCH ID	O		9.2.3.3	UL CCTrCH in which the DCH is mapped.		
>>CCTrCH ID	O		9.2.3.3	DL CCTrCH in which the DCH is mapped		
>>Transport Format Set	O		9.2.1.59	For the UL.		
>>Transport Format Set	O		9.2.1.59	For the DL.		
>>Allocation/Retention Priority	O		9.2.1.1A			
>>Frame Handling Priority	O		9.2.1.30			

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCHs TDD To Modify		1..<maxno of DCHs>		
>UL FP Mode	O		9.2.1.66	
>ToAWS	O		9.2.1.61	
>ToAWE	O		9.2.1.60	
>Transport Bearer Request Indicator	M		9.2.1.62A	
>DCH Specific Info		1..<maxno of DCHs>		
>>DCH ID	M		9.2.1.20	
>>CCTrCH ID	O		9.2.3.3	UL CCTrCH in which the DCH is mapped.
>>CCTrCH ID	O		9.2.3.3	DL CCTrCH in which the DCH is mapped
>>Transport Format Set	O		9.2.1.59	For the UL.
>>Transport Format Set	O		9.2.1.59	For the DL.
>>Allocation/Retention Priority	O		9.2.1.1A	
>>Frame Handling Priority	O		9.2.1.30	

Range Bound	Explanation
MmaxnoofDCHs	Maximum number of DCHs for one UE

9.2.3.4E DL Timeslot Information

The DL Timeslot Information IE provides information for DL Time slot to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
DL Timeslot Information		$1..<max\ no\ of\ DLts>1..$ $<max\ no\ of\ DLts>$		
>Time Slot	M		9.2.3.23	
>Midamble Shift and Burst Type	M		9.2.3.7	
>TFCI Presence	M		9.2.1.57	
>DL Code Information	M		TDD DL Code Information 9.2.3.19B	

Range Bound	Explanation
$M_{max\ no\ of\ DLts}$	Maximum number of Downlink time slots per Radio Link

9.2.3.4F DL Time Slot ISCP Info

The *DL Time Slot ISCP Info* IE provides information for DL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
DL Time Slot ISCP Info		$1..<max\ no\ of\ DLts>1..$ $<max\ no\ of\ DLts>$		
>Time Slot	M		9.2.3.23	
>DL Timeslot ISCP	M		9.2.3.4B	

Range Bound	Explanation
$M_{max\ no\ of\ DLts}$	Maximum number of Downlink time slots per Radio Link for 3.84Mcps TDD.

9.2.3.4G Cell Sync Burst Code

The *Cell Sync Burst Code* IE indicates which Code is used for a given Cell Sync Burst.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Cell Sync Burst Code			INTEGER (0..7)	

9.2.3.4H Cell Sync Burst Code Shift

The *Cell Sync Burst Code Shift* IE indicates the number of code shifts used for a given Cell Sync Burst.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Cell Sync Burst Code Shift			INTEGER (0..7)	

9.2.3.4I CSB Measurement ID

The *Cell Sync Burst Measurement ID* IE uniquely identifies any cell synchronization burst measurement per Node B - eControl Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CSB Measurement ID			Integer INTEGER (0..65535)	

9.2.3.4J Cell Sync Burst Repetition Period

The *Cell Sync Burst Repetition Period* IE represents the number of consecutive Radio Frames after which the cell synchronisation burst transmission/measurement is repeated. This means that if the Time Slot K is assigned to the cell synchronisation burst transmission/measurements in the Radio Frame J , the cell synchronisation burst transmission/measurement is also in all the Radio Frames $J+n*Repetition\ Period$.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst Repetition Period			INTEGER (0..4095)	

9.2.3.4K Cell Sync Burst SIR

Indicates the Signal to Interference Ratio of the cell synchronisation burst measurement according definition in [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst SIR			INTEGER (0..31)	According to mapping in [23]

9.2.3.4L Cell Sync Burst Timing

The *Cell Sync Burst Timing* IE defines the time of start (defined by the first detected path in time) of the cell synchronisation burst of a neighbouring cell see [5].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell Sync Burst Timing			CHOICE INTEGER (0..255) or INTEGER (0..1048575)	According to mapping in [23]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Phase				According to mapping in [23]
>Initial Phase				
>>Cell Sync Burst Timing Value	M		INTEGER (0..1048575)	
>Steady State Phase				
>>Cell Sync Burst Timing Value	M		INTEGER (0..255)	

9.2.3.4M Cell Sync Burst Timing Threshold

The *Cell Sync Burst Timing Threshold* IE defines the threshold that shall trigger a CELL SYNCHRONISATION REPORT Cell Synchronisation Report message.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst Timing Threshold			INTEGER (0..254)	Unit: 0-chips Range: 0 .. 31.75 chips Step1: 0.125 chips 2: 0.250 chips ... 254: 31.75 chips

9.2.3.4N CSB Transmission ID

The *Cell Sync Burst Transmission ID* IE uniquely identifies any cell synchronisation burst transmission per Node B-*e*Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CSB Transmission ID			Integer INTEGER (0..65535)	

9.2.3.4O DL Timeslot Information LCR

The *DL Timeslot Information LCR* IE provides information for DL Time slot to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
DL Timeslot Information LCR		$1..<maxno\ of\ DLtsLCR>$ $\geq 1..$ $<Maxnoof\ DLtsLCR>$		
>Time Slot LCR	M		9.2.3.24A	
>Midamble Shift LCR	M		9.2.3.7A	
>TFCI Presence	M		9.2.1.57	
>DL Code Information	M		TDD DL Code Information LCR 9.2.3.19C	

Range Bound	Explanation
$MmaxnoofDLtsLCR$	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.

9.2.3.4PGA DL Time Slot ISCP Info LCR

The *DL Time Slot ISCP Info LCR* IE provides information for DL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
DL Time Slot ISCP Info LCR		$1..<maxno\ of\ DLtsLCR>$ $\geq 1..$ $<maxnoof\ DLLCRs>$		
>Time Slot LCR	M		9.2.3.24A	
>DL Timeslot ISCP	M		9.2.3.4B	

Range bBound	Explanation
$M_{maxnoofDLtsLCRs}$	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.

9.2.3.5 DPCH ID

The DPCH ID identifies unambiguously a DPCH inside a Radio Link.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
DPCH ID			INTEGER (0..239)	

9.2.3.5A DSCH TDD Information

The *DSCH TDD Information* IE provides information for DSCHs to be established.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescriptions
DSCH TDD Information		$1..<maxno\ of\ DSCHs>$ $1\ to$ $<Maxnoof\ DSCHs>$		
>DSCH ID	M		9.2.1.27	
>CCTrCH ID	M		9.2.3.2	DL CCTrCH in which the DSCH is mapped
>Transport Format Set	M		9.2.1.59	For DSCH
>Allocation/Retention Priority	M		9.2.1.1A	
>Frame hHandling Priority	M		9.2.1.30	
>ToAWS	M		9.2.1.61	
>ToAWE	M		9.2.1.60	

Range bBound	Explanation
$M_{maxnoofDSCHs}$	Maximum number of DSCH for one UE

9.2.3.5B DwPCH Power

DwPCH Power is the power that shall be used for transmitting the DwPCH in a cell.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
DwPCH Power			INTEGER (-150..+400,...)	Unit: dBm Range: -15..+40 dBm StepGranularity: 0.1 dB

9.2.3.5C Frame Adjustment vValue

The *Frame Adjustment vValue* IE represents the frame number correction within the initial synchronisation phase.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
Frame Adjustment vValue			INTEGER (0..4095)	$SFN_{new}=(SFN_{old}+Frame\ Adjustment\ vValue)\ mod\ 4096$

9.2.3.5D IPDL TDD Parameter

The *IPDL TDD Parameter* IE provides information about IPDL to be applied for TDD when activated.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
IP SpacingTDD	M		ENUMERATED (30, 40, 50, 70, 100, ...)	See [21]
IP Start	M		IntegerINTEGER (0..4095)	See [21]
IP Slot	M		IntegerINTEGER (0..14)	See [21]
IP PCCPCH	M		ENUMERATED_ Switch off 1 frame, Switch off 2 frames)	See [21]
Burst Mode parameters	O		9.2.1.5A	

9.2.3.5E Max FPACH Power

Max FPACH Power is the maximum power that shall be used for transmitting the FPACH in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
FPACH Power			INTEGER (-150..+400,...)	Unit: dBm Range: -15 .. +40 dBm StepGranularity: 0.1 dB

9.2.3.6 Max PRACH Midamble Shift

Indicates the maximum number of Midamble shifts to be used in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Max PRACH Midamble Shifts			ENUMERATED (4, 8,...)	

9.2.3.7 Midamble Shift And Burst Type

This information element indicates burst type and midamble allocation.

The 256 chip midamble supports 3 different time shifts, the 512 chips midamble may support 8 or even 16 time shifts.

Three different midamble allocation schemes exist:

Default midamble: the midamble shift is selected by layer 1 depending on the associated channelisation code (DL and UL)

Common midamble: the midamble shift is chosen by layer 1 depending on the number of channelisation codes (possible in DL only)

UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL)

IE/Group-Name	Presence	Range	IE type and reference	Semantics description
CHOICE <i>Burst Type</i>				
>Type1				
>>Midamble Allocation Mode	M		Enumerated (Default midamble, Common midamble, UE specific midamble)	
>> Midamble Configuration Burst Type 1 And 3	M		Integer(4, 8, 16)	As defined in [19]
>>Midamble Shift	C-UE		Integer(0..15)	
>Type2				
>>Midamble Allocation Mode	M		Enumerated (Default midamble, Common midamble, UE specific midamble)	
>> Midamble Configuration Burst Type 2	M		Integer(3,6)	As defined in [19]
>>Midamble Shift	C-UE		INTEGER (0..5)	
>Type3				
>>Midamble Allocation Mode	M		Enumerated (Default midamble, UE specific midamble)	UE-only
>> Midamble Configuration Burst Type 1 And 3	M		Integer(4, 8, 16)	As defined in [19]
>>Midamble Shift	C-UE		Integer(0..15)	

Condition	Explanation
UE	The IE shall be present if the <i>Midamble Allocation Mode</i> IE is set to "UE-specific midamble".

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Burst Type				
>Type1				
>>Midamble Configuration Burst Type 1 And 3	M		INTEGER (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	M			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (0..15)	
>Type2				
>>Midamble Configuration Burst Type 2	M		INTEGER (3,6)	As defined in [19]
>>CHOICE Midamble Allocation Mode	M			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Short	M		INTEGER (0..5)	
>Type3				UL only
>>Midamble Configuration Burst Type 1 And 3	M		INTEGER (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	M			
>>>Default Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (0..15)	

9.2.3.7A Midamble sShift LCR

This information element indicates midamble allocation in 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Midamble Allocation Mode	M		Enumerated ENUMERATED (Default midamble, Common midamble, UE specific midamble, ...)	
Midamble Shift LCR	C-UE		Integer INTEGER (0..15)	

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation Mode IE is set to "UE-specific midamble".

9.2.3.7B Number of cycles Per SFN Period

The Number of eCycles pPer SFN pPeriod IE indicates the number of repetitions per SFN period where the same schedule shall apply.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Cycles Per SFN Period			ENUMERATED (1, 2, 4, 8, ...)	

9.2.3.7C Number Of Repetitions Per Cycle Period

The *Number Of Repetitions Per Cycle Period* IE indicates the number of Sync frames per Cycle Length where the cell synchronisation bursts shall be transmitted or the cell synchronisation bursts from the neighbouring cells shall be measured.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Repetitions Per Cycle Period			INTEGER (2..10)	

9.2.3.8 Paging Indicator Length

The Paging Indicator Length indicates the number of symbols for Page Indication transmitted in one timeslot (see ref [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging Indicator Length			ENUMERATED (2, 4, 8,...)	

9.2.3.9 PCCPCH Power

The Primary CCPCH power is the power that shall be used for transmitting the P CCPCH in a cell. The P CCPCH power is the reference power in a TDD-cell. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PCCPCH Power			INTEGER (-15..+40,...)	Unit: dBm Range: -15 ..+40 dBm StepGranularity: 0.1 dB

9.2.3.10 PDSCH ID

The PDSCH ID identifies unambiguously a PDSCH inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PDSCH ID			INTEGER (0..255)	

9.2.3.11 PDSCH Set ID

The PDSCH Set Id identifies unambiguously a PDSCH Set inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PDSCH Set ID			INTEGER (0..255)	See ref. [6]

9.2.3.12 PUSCH ID

The PUSCH ID identifies unambiguously a PUSCH inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PUSCH ID			INTEGER (0..255)	

9.2.3.13 PUSCH Set ID

The PUSCH Set ID identifies unambiguously a PUSCH Set inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PUSCH Set ID			INTEGER (0..255)	See ref. [6]

9.2.3.14 PRACH Midamble

The PRACH Midamble indicates if only the Basic Midamble Sequence or also the time-inverted Midamble Sequence is used.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PRACH Midamble			ENUMERATED (Inverted, Direct)	

9.2.3.14A Reference Clock Availability

The *Reference Clock Availability* IE is used to indicate the presence and operating of a Reference Clock connected to a TDD cell for cell synchronisation purpose.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference Clock Availability			ENUMERATED_ (Available, Not Available)	

9.2.3.14B Reference SFN Offset

The *Reference SFN Offset* IE indicates the number of frames the reference SFN shall be shifted compared to the SFN derived from the synchronisation port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference SFN Offset			INTEGER_(0..255)	

9.2.3.15 Repetition Length

The Repetition Length represents the number of consecutive Radio Frames inside a Repetition Period in which the same Time Slot is assigned to the same Physical Channel see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Length			INTEGER_(1..63)	

9.2.3.16 Repetition Period

The Repetition Period represents the number of consecutive Radio Frames after which the same assignment scheme of Time Slots to a Physical Channel is repeated. This means that if the Time Slot K is assigned to a physical channel in the Radio Frame J , it is assigned to the same physical channel also in all the Radio Frames $J+n*Repetition\ Period$ (where n is an integer) see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Period			ENUMERATED (1, 2, 4, 8, 16, 32, 64)	

9.2.3.17 SCH Time Slot

The *SCH Time Slot* IE represents the first time slot (k) of a pair of time slots inside a Radio Frame that shall be assigned to the Physical Channel SCH. The *SCH Time Slot* IE is only applicable if the value of *Sync Case* IE is Case 2 since in this case the SCH is allocated in TS# k and TS# $k+8$.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SCH Time Slot			INTEGER_(0..6)	

9.2.3.18 Sync Case

The SCH and PCCPCH are mapped on one or two downlink slots per frame. There are two cases of SCH and PCCPCH allocation as follows:

- Case 1) SCH and PCCPCH allocated in a single TS# k
- Case 2) SCH allocated in two TS: TS# k and TS# $k+8$
PCCPCH allocated in TS# k

[1.28Mcps TDD - There is no Sync Case indication needed for 1.28Mcps TDD. If the *Sync Case* IE must be included in a message from CRNC to Node B used for 1.28Mcps TDD, the CRNC should indicate Sync Case 1 and the Node B shall ignore it.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Case			Integer-INTEGER (1,2,...)	

9.2.3.18A Special Burst Scheduling

The number of frames between special burst transmissions during DTX.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Special Burst Scheduling			Integer-INTEGER (1, 2, ..., 256)	Number of frames between special burst transmission during DTX

9.2.3.18B SYNC_DL Code ID

The SYNC_DL Code ID identifies the SYNC_DL Code which used by DwPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SYNC_DL Code ID			INTEGER (1..32,...)	

9.2.3.18C Sync Frame Number

The *Sync Frame Number* IE indicates the number of the Sync frame per Cycle Length where the cell synchronisation bursts shall be transmitted or the cell synchronisation bursts from the neighbouring cells shall be measured.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Frame Number			INTEGER (1..10)	

9.2.3.18D Synchronisation Report Characteristics

The *Synchronisation Report Characteristics* IE defines how the reporting on measured cell synchronisation bursts shall be performed

Different methods shall apply for the measured cell synchronisation burst reports. In the frequency acquisition phase the measurement report shall be sent when the frequency locking is completed. In the initial phase and for the measurement on late-entrant cells an immediate report after the measured frame is expected.

In the steady-state phase measurement reports may be given after every measured frame, after every SFN period, after every cycle length or only when the requested threshold is exceeded.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Synchronisation Report Characteristics Type	M		ENUMERATED (Frame related, SFN period related, Cycle length related, Threshold exceeding, Frequency Acquisition completed, ...)	
Threshold Exceeding	C-Threshold Exceeding			Applies only to the Steady State Phase
>Cell Sync Burst Threshold Information		$1..<max\ of\ Cell\ Sync\ Bursts>1..<max\ of\ Cell\ Sync\ Bursts>$		
>>Sync Frame Number To Receive	M		Sync Frame Number 9.2.3.18C	
>>Cell Sync Burst Information		$1..<max\ of\ reception\ per\ Sync\ Frame>1..<max\ of\ reception\ per\ Sync\ Frame>$		
>>>Cell Sync Burst Code	M		9.2.3.4G	

>>>Cell Sync Burst Code sShift	M		9.2.3.4H	
>>>Cell Sync Burst Arrival Time	O		Cell Sync Burst Timing 9.2.3.4L	
>>>Cell Sync Burst Timing Threshold	O		9.2.3.4M	

Range bBound	Explanation
$\max\text{noofCellSyncBursts}$	Maximum number of cell synchronisation burst per cycle
$\max\text{noofreceptionsperSyncFrame}$	Maximum number of cell synchronisation burst receptions per Sync Frame

9.2.3.18E Synchronisation Report Type

The *Synchronisation Report Type* IE represents the individual types of synchronisation reports that shall apply within the individual synchronisation phases. (see [17]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Synchronisation Report Type			ENUMERATED (Initial Phase, Steady-State Phase, Late-Entrant Cell, Frequency Acquisition, ...)	

9.2.3.19 TDD Channelisation Code

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code, that can have a spreading factor of 1, 2, 4, 8 or 16.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Channelisation Code			ENUMERATED ((1/1), (2/1), (2/2), (4/1), .. (4/4), (8/1), .. (8/8), (16/1), .. (16/16),....)	

9.2.3.19a TDD Channelisation Code LCR

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In 1.28Mcps TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code, that can have a spreading factor of 1, 2, 4, 8 or 16 and there is a choice between QPSK and 8PSK modulation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Channelisation Code			9.2.3.19 ENUMERATED ((1/1), (2/1), (2/2), (4/1), ..., (4/4), (8/1), ..., (8/8), (16/1), ..., (16/16), ...)	
Modulation			ENUMERATED (QPSK, 8PSK, ...)	Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD

9.2.3.19A TDD DPCH Offset

The Offset represents the phase information for the allocation of a group of dedicated physical channels. The first range is used when a starting offset is not required and the TDD Physical channel offset for each DPCH in the CCTrCH shall be directly determined from the TDD DPCH Offset. The second range is used when a starting offset is required. The TDD DPCH Offset shall map to the CFN and the TDD Physical Channel Offset for each DPCH in this CCTrCH shall be calculated by TDD DPCH Offset *mod* Repetition period, see ref. [18].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TDD DPCH Offset			CHOICE INTEGER (0..63) or INTEGER (0..255)	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Offset Type				
>Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER (0..255)	
>No Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER (0..63)	

9.2.3.19B TDD DL Code Information

The TDD DL Code Information IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
TDD DL Code Information		1..<maxno of DPCHs> 1.. <maxnoOf DPCH>		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code	M		9.2.3.19	

Range Bound	Explanation
maxnoOfDPCHs	Maximum number of DPCHs in one CCTrCH

9.2.3.19C TDD DL Code Information LCR

The TDD DL Code Information LCR IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD DL Code Information LCR		$1..<maxno\ of\ DPCHs\ LCR>1..<maxno\ Of\ DPCHLCR>$		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code LCR	M		9.2.3.19a	

Range Bound	Explanation
$maxnoofDPCHsLCRmaxnoOfDPCHLCR$	Maximum number of DPCH in one CCTrCH for 1.28Mcps TDD

9.2.3.20 TDD Physical Channel Offset

The Offset represents the phase information for the allocation of a physical channel. (SFN mod Repetition Period = Offset) see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Physical Channel Offset			INTEGER (0..63)	

9.2.3.21 TDD TPC DL Step Size

This parameter indicates step size for the DL power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Downlink Step Size			ENUMERATED (1, 2, 3,...)	

9.2.3.21A TDD UL Code Information

The *TDD UL Code Information* IE provides information for UL Code to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD UL Code Information		$1..<maxno\ of\ DPCHs>1..<maxno\ Of\ DPCH>$		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code	M		9.2.3.19	

Range Bound	Explanation
$MmaxnoOfDPCHs$	Maximum number of DPCHs in one CCTrCH

9.2.3.21B TDD UL Code Information LCR

The *TDD UL Code Information LCR* IE provides information for UL Code to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD UL Code Information LCR		1..<maxno of DPCHs LCR>1..<maxnoOf DPCH LCR>		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code LCR	M		9.2.3.19a	

Range Bound	Explanation
MmaxnoOfDPCHsLCR	Maximum number of DPCHs in one CCTrCH for 1.28Mcps TDD.

9.2.3.22 TFCI Coding

The TFCI Coding describes the way how the TFCI bits are coded. By default 1 TFCI bit is coded with 4 bits, 2 TFCI bits are coded with 8 bits, 3-5 TFCI bits are coded with 16 bits and 6-10 TFCI bits are coded with 32 bits.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Coding			Enumerated ENUMERATED (4, 8, 16, 32,...)	

9.2.3.22a Timing Adjustment Value

The *Timing Adjustment Value* IE indicates the timing correction within a Frame. Type 1 is used for the initial phase of Node B synchronisation. Type 2 is used for the steady-state phase of Node B synchronisation.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Timing Adjustment value			CHOICE INTEGER (0..255) or INTEGER (0..1048575)	According to mapping in [23]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Phase				According to mapping in [23]
>Initial Phase				
>>Timing Adjustment Value	M		INTEGER (0..255)	
>Steady State Phase				
>>Timing Adjustment Value	M		INTEGER (0..1048575)	

9.2.3.22A Timing Advance Applied

Defines the need for Rx Timing Deviation measurement results to be reported in a particular cell.

For [1.28Mcps TDD], this IE **mustshall** be set to “No”.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timing Advance Applied			ENUMERATED (Yes, No)	

9.2.3.23 Time Slot

The Time Slot represents the minimum time interval inside a Radio Frame that can be assigned to a Physical Channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot			INTEGER (0..14)	

9.2.3.24 Time Slot Direction

This parameter indicates whether the TS in the cell is used in Uplink or Downlink direction.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot Direction			Enumerated ENUMERATED (UL, DL, ...)	

9.2.3.24A Time Slot LCR

The Time Slot LCR is the number of the traffic_time slot_ within a 5 ms subframe of LCR TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot LCR			INTEGER (0..6)	

9.2.3.25 Time Slot Status

This parameter indicates whether the TS in the cell is active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot Status			Enumerated ENUMERATED (Active, Not_Active, ...)	

9.2.3.26 Transmission Diversity Applied

Defines if Transmission Diversity on DCHs is to be applied in a cell (see ref. [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Diversity Applied			Boolean BOOLEAN	True: Transmission Diversity shall be applied in this Cell. False: Transmission Diversity shall not be applied in this Cell.

9.2.3.26A UL Timeslot ISCP

UL Timeslot ISCP is the measured interference in a uplink timeslot at the Node B, see ref. [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
UL Timeslot ISCP			INTEGER (0..127)	According to mapping in [23].

9.2.3.26B UL PhysCH SF Variation

Indicates whether variation of SF in UL is supported by Radio Link or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
UL PhysCH SF Variation			ENUMERATED (SF_Variation_supported, SF_Variation_NOT_supported)	

9.2.3.26C UL Timeslot Information

The *UL Timeslot Information* IE provides information on the time slot allocation for an UL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
UL Timeslot Information		<i>1..<maxno of ULts>1..<maxno of ULts></i>		
>Time Slot	M		9.2.3.23	
>Midamble Shift and Burst Type	M		9.2.3.7	
>TFCI Presence	M		9.2.1.57	
>UL Code Information	M		TDD UL Code Information 9.2.3.21A	

Range Bound	Explanation
<i>Mmaxno of ULts</i>	Maximum number of Uplink time slots per Radio Link

9.2.3.26D UL Time Slot ISCP Info

The *UL Time Slot ISCP Info* IE provides information for UL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
UL Time Slot ISCP Info		<i>1..<maxno of ULts>1..<maxno of ULts></i>		
>Time Slot	M		9.2.3.23	
>UL Timeslot ISCP	M		9.2.3.26A	

Range Bound	Explanation
<i>Mmaxno of ULts</i>	Maximum number of Uplink time slots per Radio Link

9.2.3.26E UL Timeslot Information LCR

The *UL Timeslot Information* IE provides information on the time slot allocation for an UL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
UL Timeslot Information LCR		$1..<maxno\ of\ ULtsLCR>$ $\geq 1..$ $<Maxnoof\ ULtsLCR>$		
>Time Slot LCR	M		9.2.3.24A	
>Midamble Shift LCR	M		9.2.3.7A	
>TFCI Presence	M		9.2.1.57	
>UL Code Information	M		TDD UL Code Information LCR 9.2.3.21B	

Range Bound	Explanation
$MmaxnoofULtsLCR$	Maximum number of Uplink time slots per Radio Link for 1.28Mcps TDD.

9.2.3.26F UL Time Slot ISCP Info LCR

The *UL Time Slot ISCP Info LCR* IE provides information for UL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
UL Time Slot ISCP Info LCR		$1..<maxno\ of\ ULtsLCR>$ $\geq 1..$ $<Maxnoof\ ULtsLCR>$		
>Time Slot LCR	M		9.2.3.24A	
>UL Timeslot ISCP	M		9.2.3.26A	

Range Bound	Explanation
$MmaxnoofULtsLCR$	Maximum number of Uplink time slots per Radio Link for 1.28Mcps TDD

9.2.3.27 USCH ID

The USCH ID uniquely identifies a USCH within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
USCH ID			INTEGER (0..255)	

9.2.3.28 USCH Information

The *USCH Information* IE provides information for USCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
USCH Information		<i>1..<maxno of USCHs> 1 to <Maxno of USCHs></i>		
>USCH ID	M		9.2.3.27	
>CCTrCH ID	M		9.2.3.3	UL CCTrCH in which the USCH is mapped
>Transport Format Set	M		9.2.1.59	For USCH
>Allocation/Retention Priority	M		9.2.1.1A	

Range bound	Explanation
<i>Mmaxno of USCHs</i>	Maximum number of USCHs for one UE

9.2.3.29 USCH Information Response

The *USCH Information Response* IE provides information for USCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
USCH Information Response		<i>1..<maxno of USCHs> 1.. <Maxno of USCHs></i>		
>USCH ID	M		9.2.3.27	
>Binding ID	O		9.2.1.4	
>Transport Layer Address	O		9.2.1.63	

Range bound	Explanation
<i>Mmaxno of USCHs</i>	Maximum number of USCHs for one UE

9.2.3.30 SCTD Indicator

Indicates if SCTD antenna diversity is applied or not to the PCCPCH and PICH [3.84Mcps TDD].

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
SCTD Indicator			ENUMERATED_(active, inactive)	

9.3 Message and Information eElement aAbstract sSyntax (with ASN.1)

9.3.0 General

Subclause 9.3 presents the Abstract Syntax of NBAP protocol with ASN.1. In case there is contradiction between the ASN.1 definition in this subclause and the tabular format in subclauses 9.1 and 9.2, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, where the tabular format shall take precedence.

The ASN.1 definition specifies the structure and content of NBAP messages. NBAP messages can contain any IEs specified in the object set definitions for that message without the order or number of occurrence being restricted by ASN.1. However, for this version of the standard, a sending entity shall construct a NBAP message according to the PDU definitions module and with the following additional rules (Note that in the following IE means an IE in the object set with an explicit id. If one IE needed to appear more than once in one object set, then the different occurrences have different IE ids):

- IEs shall be ordered (in an IE container) in the order they appear in object set definitions.
- Object set definitions specify how many times IEs may appear. An IE shall appear exactly once if the presence field in an object has value "mandatory". An IE may appear at most once if the presence field in an object has value "optional" or "conditional". If in a tabular format there is multiplicity specified for an IE (i.e. an IE list) then in the corresponding ASN.1 definition the list definition is separated into two parts. The first part defines an IE container list where the list elements reside. The second part defines list elements. The IE container list appears as an IE of its own. For this version of the standard an IE container list may contain only one kind of list elements.

If a NBAP message that is not constructed as defined above is received, this shall be considered as Abstract Syntax Error, and the message shall be handled as defined for Abstract Syntax Error in subclause 10.3.6.

9.3.1 Usage of Private Message mechanism for non-standard use

The private message mechanism for non-standard use may be used

- For special operator- (and/or vendor) specific features considered not to be part of the basic functionality, i.e. the functionality required for a complete and high-quality specification in order to guarantee multi-vendor inter-operability.
- By vendors for research purposes, e.g. to implement and evaluate new algorithms/features before such features are proposed for standardisation

The private message mechanism shall not be used for basic functionality. Such functionality shall be standardised.

9.3.2 Elementary Procedure Definitions

```
-- *****
--
-- Elementary Procedure definitions
--
-- *****
```

```
NBAP-PDU-Descriptions {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Descriptions (0) }
```

```
DEFINITIONS AUTOMATIC TAGS ::=
```

```
BEGIN
```

```
-- *****
--
-- IE parameter types from other modules.
--
-- *****
```

```
IMPORTS
```

```
    Criticality,
    ProcedureID,
    MessageDiscriminator,
    TransactionID
```

```
FROM NBAP-CommonDataTypes
```

```
    CommonTransportChannelSetupRequestFDD,
    CommonTransportChannelSetupRequestTDD,
    CommonTransportChannelSetupResponse,
    CommonTransportChannelSetupFailure,
    CommonTransportChannelReconfigurationRequestFDD,
    CommonTransportChannelReconfigurationRequestTDD,
    CommonTransportChannelReconfigurationResponse,
    CommonTransportChannelReconfigurationFailure,
    CommonTransportChannelDeletionRequest,
    CommonTransportChannelDeletionResponse,
    BlockResourceRequest,
    BlockResourceResponse,
    BlockResourceFailure,
    UnblockResourceIndication,
    AuditFailure,
    AuditRequiredIndication,
    AuditRequest,
    AuditResponse,
    CommonMeasurementInitiationRequest,
    CommonMeasurementInitiationResponse,
    CommonMeasurementInitiationFailure,
    CommonMeasurementReport,
    CommonMeasurementTerminationRequest,
    CommonMeasurementFailureIndication,
    CellSetupRequestFDD,
    CellSetupRequestTDD,
    CellSetupResponse,
    CellSetupFailure,
    CellReconfigurationRequestFDD,
    CellReconfigurationRequestTDD,
    CellReconfigurationResponse,
```

CellReconfigurationFailure,
CellDeletionRequest,
CellDeletionResponse,
InformationExchangeInitiationRequest,
InformationExchangeInitiationResponse,
InformationExchangeInitiationFailure,
InformationReport,
InformationExchangeTerminationRequest,
InformationExchangeFailureIndication,
ResourceStatusIndication,
SystemInformationUpdateRequest,
SystemInformationUpdateResponse,
SystemInformationUpdateFailure,
ResetRequest,
ResetResponse,
RadioLinkPreemptionRequiredIndication,
RadioLinkSetupRequestFDD,
RadioLinkSetupRequestTDD,
RadioLinkSetupResponseFDD,
RadioLinkSetupResponseTDD,
RadioLinkSetupFailureFDD,
RadioLinkSetupFailureTDD,
RadioLinkAdditionRequestFDD,
RadioLinkAdditionRequestTDD,
RadioLinkAdditionResponseFDD,
RadioLinkAdditionResponseTDD,
RadioLinkAdditionFailureFDD,
RadioLinkAdditionFailureTDD,
RadioLinkReconfigurationPrepareFDD,
RadioLinkReconfigurationPrepareTDD,
RadioLinkReconfigurationReady,
RadioLinkReconfigurationFailure,
RadioLinkReconfigurationCommit,
RadioLinkReconfigurationCancel,
RadioLinkReconfigurationRequestFDD,
RadioLinkReconfigurationRequestTDD,
RadioLinkReconfigurationResponse,
RadioLinkDeletionRequest,
RadioLinkDeletionResponse,
DL-PowerControlRequest,
DL-PowerTimeslotControlRequest,
DedicatedMeasurementInitiationRequest,
DedicatedMeasurementInitiationResponse,
DedicatedMeasurementInitiationFailure,
DedicatedMeasurementReport,
DedicatedMeasurementTerminationRequest,
DedicatedMeasurementFailureIndication,
RadioLinkFailureIndication,
RadioLinkRestoreIndication,
CompressedModeCommand,
ErrorIndication,
PrivateMessage,
PhysicalSharedChannelReconfigurationRequestTDD,

PhysicalSharedChannelReconfigurationResponseTDD,
PhysicalSharedChannelReconfigurationFailureTDD,
CellSynchronisationInitiationRequestTDD,
CellSynchronisationInitiationResponseTDD,
CellSynchronisationInitiationFailureTDD,
CellSynchronisationReconfigurationRequestTDD,
CellSynchronisationReconfigurationResponseTDD,
CellSynchronisationReconfigurationFailureTDD,
CellSynchronisationAdjustmentRequestTDD,
CellSynchronisationAdjustmentResponseTDD,
CellSynchronisationAdjustmentFailureTDD,
CellSynchronisationReportTDD,
CellSynchronisationTerminationRequestTDD,
CellSynchronisationFailureIndicationTDD
FROM NBAP-PDU-Contents

id-audit,
id-auditRequired,
id-blockResource,
id-cellDeletion,
id-cellReconfiguration,
id-cellSetup,
id-cellSynchronisationInitiation,
id-cellSynchronisationReconfiguration,
id-cellSynchronisationReporting,
id-cellSynchronisationTermination,
id-cellSynchronisationFailure,
id-commonMeasurementFailure,
id-commonMeasurementInitiation,
id-commonMeasurementReport,
id-commonMeasurementTermination,
id-commonTransportChannelDelete,
id-commonTransportChannelReconfigure,
id-commonTransportChannelSetup,
id-compressedModeCommand,
id-dedicatedMeasurementFailure,
id-dedicatedMeasurementInitiation,
id-dedicatedMeasurementReport,
id-dedicatedMeasurementTermination,
id-downlinkPowerControl,
id-downlinkPowerTimeslotControl,
id-errorIndicationForDedicated,
id-errorIndicationForCommon,
id-informationExchangeFailure,
id-informationExchangeInitiation,
id-informationReporting,
id-informationExchangeTermination,
id-physicalSharedChannelReconfiguration,
id-privateMessageForDedicated,
id-privateMessageForCommon,
id-radioLinkAddition,
id-radioLinkDeletion,
id-radioLinkFailure,


```

    id-radioLinkPreemption,
    id-radioLinkRestoration,
    id-radioLinkSetup,
    id-reset,
    id-resourceStatusIndication,
    id-cellSynchronisationAdjustment,
    id-synchronisedRadioLinkReconfigurationCancellation,
    id-synchronisedRadioLinkReconfigurationCommit,
    id-synchronisedRadioLinkReconfigurationPreparation,
    id-systemInformationUpdate,
    id-unblockResource,
    id-unSynchronisedRadioLinkReconfiguration
FROM NBAP-Constants;

-- *****
--
-- Interface Elementary Procedure Class
--
-- *****

NBAP-ELEMENTARY-PROCEDURE ::= CLASS {
    &InitiatingMessage           ,
    &SuccessfulOutcome           OPTIONAL,
    &UnsuccessfulOutcome         OPTIONAL,
    &Outcome                     OPTIONAL,
    &messageDiscriminator        MessageDiscriminator,
    &procedureID                 ProcedureID    UNIQUE,
    &criticality                  Criticality      DEFAULT ignore
}

WITH SYNTAX {
    INITIATING MESSAGE           &InitiatingMessage
    [SUCCESSFUL OUTCOME          &SuccessfulOutcome]
    [UNSUCCESSFUL OUTCOME        &UnsuccessfulOutcome]
    [OUTCOME                      &Outcome]
    MESSAGE DISCRIMINATOR        &messageDiscriminator
    PROCEDURE ID                  &procedureID
    [CRITICALITY                  &criticality]
}

-- *****
--
-- Interface PDU Definition
--
-- *****

NBAP-PDU ::= CHOICE {
    initiatingMessage           InitiatingMessage,
    successfulOutcome           SuccessfulOutcome,
    unsuccessfulOutcome         UnsuccessfulOutcome,
    outcome                     Outcome,
    ...
}

```

```
InitiatingMessage ::= SEQUENCE {
    procedureID      NBAP-ELEMENTARY-PROCEDURE.&procedureID   ( {NBAP-ELEMENTARY-PROCEDURES} ),
    criticality      NBAP-ELEMENTARY-PROCEDURE.&criticality   ( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    messageDiscriminator
                    NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    transactionID    TransactionID,
    value            NBAP-ELEMENTARY-PROCEDURE.&InitiatingMessage( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} )
}

```

```
SuccessfulOutcome ::= SEQUENCE {
    procedureID      NBAP-ELEMENTARY-PROCEDURE.&procedureID   ( {NBAP-ELEMENTARY-PROCEDURES} ),
    criticality      NBAP-ELEMENTARY-PROCEDURE.&criticality   ( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    messageDiscriminator
                    NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    transactionID    TransactionID,
    value            NBAP-ELEMENTARY-PROCEDURE.&SuccessfulOutcome( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} )
}

```

```
UnsuccessfulOutcome ::= SEQUENCE {
    procedureID      NBAP-ELEMENTARY-PROCEDURE.&procedureID   ( {NBAP-ELEMENTARY-PROCEDURES} ),
    criticality      NBAP-ELEMENTARY-PROCEDURE.&criticality   ( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    messageDiscriminator
                    NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    transactionID    TransactionID,
    value            NBAP-ELEMENTARY-PROCEDURE.&UnsuccessfulOutcome( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} )
}

```

```
Outcome ::= SEQUENCE {
    procedureID      NBAP-ELEMENTARY-PROCEDURE.&procedureID   ( {NBAP-ELEMENTARY-PROCEDURES} ),
    criticality      NBAP-ELEMENTARY-PROCEDURE.&criticality   ( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    messageDiscriminator
                    NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} ),
    transactionID    TransactionID,
    value            NBAP-ELEMENTARY-PROCEDURE.&Outcome   ( {NBAP-ELEMENTARY-PROCEDURES}{@procedureID} )
}

```

```
-- *****
--
-- Interface Elementary Procedure List
--
-- *****

```

```
NBAP-ELEMENTARY-PROCEDURES NBAP-ELEMENTARY-PROCEDURE ::= {
    NBAP-ELEMENTARY-PROCEDURES-CLASS-1      |
    NBAP-ELEMENTARY-PROCEDURES-CLASS-2      ,
    ...
}

```

```
NBAP-ELEMENTARY-PROCEDURES-CLASS-1 NBAP-ELEMENTARY-PROCEDURE ::= {
    cellSetupFDD      |
    cellSetupTDD      |
    cellReconfigurationFDD |
    cellReconfigurationTDD |
    cellDeletion      |
    commonTransportChannelSetupFDD |
    commonTransportChannelSetupTDD |
}

```

```

commonTransportChannelReconfigureFDD
commonTransportChannelReconfigureTDD
commonTransportChannelDelete
audit
blockResource
radioLinkSetupFDD
radioLinkSetupTDD
systemInformationUpdate
commonMeasurementInitiation
radioLinkAdditionFDD
radioLinkAdditionTDD
radioLinkDeletion
reset
synchronisedRadioLinkReconfigurationPreparationFDD
synchronisedRadioLinkReconfigurationPreparationTDD
unsynchronisedRadioLinkReconfigurationFDD
unsynchronisedRadioLinkReconfigurationTDD
dedicatedMeasurementInitiation
physicalSharedChannelReconfiguration
...
informationExchangeInitiation
cellSynchronisationInitiationTDD
cellSynchronisationReconfigurationTDD
cellSynchronisationAdjustmentTDD
}

NBAP-ELEMENTARY-PROCEDURES-CLASS-2 NBAP-ELEMENTARY-PROCEDURE ::= {
resourceStatusIndication
auditRequired
commonMeasurementReport
commonMeasurementTermination
commonMeasurementFailure
synchronisedRadioLinkReconfigurationCommit
synchronisedRadioLinkReconfigurationCancellation
radioLinkFailure
radioLinkPreemption
radioLinkRestoration
dedicatedMeasurementReport
dedicatedMeasurementTermination
dedicatedMeasurementFailure
downlinkPowerControlFDD
downlinkPowerTimeslotControl
compressedModeCommand
unblockResource
errorIndicationForDedicated
errorIndicationForCommon
privateMessageForDedicated
privateMessageForCommon
...
informationReporting
informationExchangeTermination
informationExchangeFailure
cellSynchronisationReportingTDD

```

```

    cellSynchronisationTerminationTDD      |
    cellSynchronisationFailureTDD
}

-- *****
--
-- Interface Elementary Procedures
--
-- *****

-- Class 1

-- *** CellSetup (FDD) ***
cellSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellSetupRequestFDD
    SUCCESSFUL OUTCOME      CellSetupResponse
    UNSUCCESSFUL OUTCOME    CellSetupFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID             { procedureCode id-cellSetup, ddMode fdd }
    CRITICALITY              reject
}

-- *** CellSetup (TDD) ***
cellSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellSetupRequestTDD
    SUCCESSFUL OUTCOME      CellSetupResponse
    UNSUCCESSFUL OUTCOME    CellSetupFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID             { procedureCode id-cellSetup, ddMode tdd }
    CRITICALITY              reject
}

-- *** CellReconfiguration(FDD) ***
cellReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellReconfigurationRequestFDD
    SUCCESSFUL OUTCOME      CellReconfigurationResponse
    UNSUCCESSFUL OUTCOME    CellReconfigurationFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID             { procedureCode id-cellReconfiguration, ddMode fdd }
    CRITICALITY              reject
}

-- *** CellReconfiguration(TDD) ***
cellReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellReconfigurationRequestTDD
    SUCCESSFUL OUTCOME      CellReconfigurationResponse
    UNSUCCESSFUL OUTCOME    CellReconfigurationFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID             { procedureCode id-cellReconfiguration, ddMode tdd }
    CRITICALITY              reject
}

-- *** CellDeletion ***

```

```

cellDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellDeletionRequest
    SUCCESSFUL OUTCOME      CellDeletionResponse
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-cellDeletion, ddMode common }
    CRITICALITY             reject
}

-- *** CommonTransportChannelSetup (FDD) ***
commonTransportChannelSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonTransportChannelSetupRequestFDD
    SUCCESSFUL OUTCOME      CommonTransportChannelSetupResponse
    UNSUCCESSFUL OUTCOME    CommonTransportChannelSetupFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonTransportChannelSetup, ddMode fdd }
    CRITICALITY             reject
}

-- *** CommonTransportChannelSetup (TDD) ***
commonTransportChannelSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonTransportChannelSetupRequestTDD
    SUCCESSFUL OUTCOME      CommonTransportChannelSetupResponse
    UNSUCCESSFUL OUTCOME    CommonTransportChannelSetupFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonTransportChannelSetup, ddMode tdd }
    CRITICALITY             reject
}

-- *** CommonTransportChannelReconfigure (FDD) ***
commonTransportChannelReconfigureFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonTransportChannelReconfigurationRequestFDD
    SUCCESSFUL OUTCOME      CommonTransportChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME    CommonTransportChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonTransportChannelReconfigure, ddMode fdd }
    CRITICALITY             reject
}

-- *** CommonTransportChannelReconfigure (TDD) ***
commonTransportChannelReconfigureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonTransportChannelReconfigurationRequestTDD
    SUCCESSFUL OUTCOME      CommonTransportChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME    CommonTransportChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonTransportChannelReconfigure, ddMode tdd }
    CRITICALITY             reject
}

-- *** CommonTransportChannelDelete ***
commonTransportChannelDelete NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonTransportChannelDeletionRequest
    SUCCESSFUL OUTCOME      CommonTransportChannelDeletionResponse
    MESSAGE DISCRIMINATOR   common
}

```

```

PROCEDURE ID      { procedureCode id-commonTransportChannelDelete, ddMode common }
CRITICALITY      reject
}

```

```
-- *** Audit ***
```

```

audit NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      AuditRequest
  SUCCESSFUL OUTCOME      AuditResponse
  UNSUCCESSFUL OUTCOME    AuditFailure
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-audit, ddMode common }
  CRITICALITY             reject
}

```

```
-- *** BlockResourceRequest ***
```

```

blockResource NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      BlockResourceRequest
  SUCCESSFUL OUTCOME      BlockResourceResponse
  UNSUCCESSFUL OUTCOME    BlockResourceFailure
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-blockResource, ddMode common }
  CRITICALITY             reject
}

```

```
-- *** RadioLinkSetup (FDD) ***
```

```

radioLinkSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkSetupRequestFDD
  SUCCESSFUL OUTCOME      RadioLinkSetupResponseFDD
  UNSUCCESSFUL OUTCOME    RadioLinkSetupFailureFDD
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-radioLinkSetup, ddMode fdd }
  CRITICALITY             reject
}

```

```
-- *** RadioLinkSetup (TDD) ***
```

```

radioLinkSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkSetupRequestTDD
  SUCCESSFUL OUTCOME      RadioLinkSetupResponseTDD
  UNSUCCESSFUL OUTCOME    RadioLinkSetupFailureTDD
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-radioLinkSetup, ddMode tdd }
  CRITICALITY             reject
}

```

```
-- *** SystemInformationUpdate ***
```

```

systemInformationUpdate NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      SystemInformationUpdateRequest
  SUCCESSFUL OUTCOME      SystemInformationUpdateResponse
  UNSUCCESSFUL OUTCOME    SystemInformationUpdateFailure
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-systemInformationUpdate, ddMode common }
  CRITICALITY             reject
}

```

```

-- *** Reset ***
reset NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      ResetRequest
    SUCCESSFUL OUTCOME      ResetResponse
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-reset, ddMode common }
    CRITICALITY             reject
}

-- *** CommonMeasurementInitiation ***
commonMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonMeasurementInitiationRequest
    SUCCESSFUL OUTCOME      CommonMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME    CommonMeasurementInitiationFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonMeasurementInitiation, ddMode common }
    CRITICALITY             reject
}

-- *** RadioLinkAddition (FDD) ***
radioLinkAdditionFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkAdditionRequestFDD
    SUCCESSFUL OUTCOME      RadioLinkAdditionResponseFDD
    UNSUCCESSFUL OUTCOME    RadioLinkAdditionFailureFDD
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkAddition, ddMode fdd }
    CRITICALITY             reject
}

-- *** RadioLinkAddition (TDD) ***
radioLinkAdditionTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkAdditionRequestTDD
    SUCCESSFUL OUTCOME      RadioLinkAdditionResponseTDD
    UNSUCCESSFUL OUTCOME    RadioLinkAdditionFailureTDD
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkAddition, ddMode tdd }
    CRITICALITY             reject
}

-- *** RadioLinkDeletion ***
radioLinkDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkDeletionRequest
    SUCCESSFUL OUTCOME      RadioLinkDeletionResponse
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkDeletion, ddMode common }
    CRITICALITY             reject
}

-- *** SynchronisedRadioLinkReconfigurationPreparation (FDD) ***
synchronisedRadioLinkReconfigurationPreparationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationPrepareFDD
    SUCCESSFUL OUTCOME      RadioLinkReconfigurationReady
}

```

```

UNSUCCESSFUL OUTCOME    RadioLinkReconfigurationFailure
MESSAGE DISCRIMINATOR   dedicated
PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
CRITICALITY             reject
}

-- *** SynchronisedRadioLinkReconfigurationPreparation (TDD) ***
synchronisedRadioLinkReconfigurationPreparationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    RadioLinkReconfigurationPrepareTDD
  SUCCESSFUL OUTCOME    RadioLinkReconfigurationReady
  UNSUCCESSFUL OUTCOME  RadioLinkReconfigurationFailure
  MESSAGE DISCRIMINATOR dedicated
  PROCEDURE ID          { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
  CRITICALITY           reject
}

-- *** UnSynchronisedRadioLinkReconfiguration (FDD) ***
unSynchronisedRadioLinkReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    RadioLinkReconfigurationRequestFDD
  SUCCESSFUL OUTCOME    RadioLinkReconfigurationResponse
  UNSUCCESSFUL OUTCOME  RadioLinkReconfigurationFailure
  MESSAGE DISCRIMINATOR dedicated
  PROCEDURE ID          { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
  CRITICALITY           reject
}

-- *** UnSynchronisedRadioLinkReconfiguration (TDD) ***
unSynchronisedRadioLinkReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    RadioLinkReconfigurationRequestTDD
  SUCCESSFUL OUTCOME    RadioLinkReconfigurationResponse
  UNSUCCESSFUL OUTCOME  RadioLinkReconfigurationFailure
  MESSAGE DISCRIMINATOR dedicated
  PROCEDURE ID          { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
  CRITICALITY           reject
}

-- *** DedicatedMeasurementInitiation ***
dedicatedMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    DedicatedMeasurementInitiationRequest
  SUCCESSFUL OUTCOME    DedicatedMeasurementInitiationResponse
  UNSUCCESSFUL OUTCOME  DedicatedMeasurementInitiationFailure
  MESSAGE DISCRIMINATOR dedicated
  PROCEDURE ID          { procedureCode id-dedicatedMeasurementInitiation, ddMode common }
  CRITICALITY           reject
}

-- *** PhysicalSharedChannelReconfiguration (TDD only) ***
physicalSharedChannelReconfiguration NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    PhysicalSharedChannelReconfigurationRequestTDD
  SUCCESSFUL OUTCOME    PhysicalSharedChannelReconfigurationResponseTDD
  UNSUCCESSFUL OUTCOME  PhysicalSharedChannelReconfigurationFailureTDD
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-physicalSharedChannelReconfiguration, ddMode tdd }
}

```



```
    CRITICALITY          reject
}

--*** InformationExchangeInitiation ***
informationExchangeInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      InformationExchangeInitiationRequest
    SUCCESSFUL OUTCOME      InformationExchangeInitiationResponse
    UNSUCCESSFUL OUTCOME    InformationExchangeInitiationFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-informationExchangeInitiation, ddMode common }
    CRITICALITY             reject
}

-- *** CellSynchronisationInitiation (TDD only) ***
cellSynchronisationInitiationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellSynchronisationInitiationRequestTDD
    SUCCESSFUL OUTCOME      CellSynchronisationInitiationResponseTDD
    UNSUCCESSFUL OUTCOME    CellSynchronisationInitiationFailureTDD
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-cellSynchronisationInitiation, ddMode tdd }
    CRITICALITY             reject
}

-- *** CellSynchronisationReconfiguration (TDD only) ***
cellSynchronisationReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellSynchronisationReconfigurationRequestTDD
    SUCCESSFUL OUTCOME      CellSynchronisationReconfigurationResponseTDD
    UNSUCCESSFUL OUTCOME    CellSynchronisationReconfigurationFailureTDD
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-cellSynchronisationReconfiguration, ddMode tdd }
    CRITICALITY             reject
}

-- *** CellSynchronisationAdjustment (TDD only) ***
cellSynchronisationAdjustmentTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellSynchronisationAdjustmentRequestTDD
    SUCCESSFUL OUTCOME      CellSynchronisationAdjustmentResponseTDD
    UNSUCCESSFUL OUTCOME    CellSynchronisationAdjustmentFailureTDD
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-cellSynchronisationAdjustment, ddMode tdd }
    CRITICALITY             reject
}

-- Class 2

-- *** ResourceStatusIndication ***
resourceStatusIndication NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      ResourceStatusIndication
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-resourceStatusIndication, ddMode common }
    CRITICALITY             ignore
}
```

```
-- *** AuditRequired ***
auditRequired NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      AuditRequiredIndication
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-auditRequired, ddMode common }
    CRITICALITY             ignore
}

-- *** CommonMeasurementReport ***
commonMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonMeasurementReport
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonMeasurementReport, ddMode common }
    CRITICALITY             ignore
}

-- *** CommonMeasurementTermination ***
commonMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonMeasurementTerminationRequest
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonMeasurementTermination, ddMode common }
    CRITICALITY             ignore
}

-- *** CommonMeasurementFailure ***
commonMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonMeasurementFailureIndication
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonMeasurementFailure, ddMode common }
    CRITICALITY             ignore
}

-- *** SynchronisedRadioLinkReconfigurationCommit ***
synchronisedRadioLinkReconfigurationCommit NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationCommit
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
    CRITICALITY             ignore
}

-- *** SynchronisedRadioReconfigurationCancellation ***
synchronisedRadioLinkReconfigurationCancellation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationCancel
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common }
    CRITICALITY             ignore
}

-- *** RadioLinkFailure ***
radioLinkFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkFailureIndication
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkFailure, ddMode common }
}
```

```
}
    CRITICALITY          ignore
}

-- *** RadioLinkPreemption ***
radioLinkPreemption NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE   RadioLinkPreemptionRequiredIndication
    MESSAGE DISCRIMINATOR  dedicated
    PROCEDURE ID         { procedureCode id-radioLinkPreemption, ddMode common }
    CRITICALITY          ignore
}

-- *** RadioLinkRestoration ***
radioLinkRestoration NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE   RadioLinkRestoreIndication
    MESSAGE DISCRIMINATOR  dedicated
    PROCEDURE ID         { procedureCode id-radioLinkRestoration, ddMode common }
    CRITICALITY          ignore
}

-- *** DedicatedMeasurementReport ***
dedicatedMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE   DedicatedMeasurementReport
    MESSAGE DISCRIMINATOR  dedicated
    PROCEDURE ID         { procedureCode id-dedicatedMeasurementReport, ddMode common }
    CRITICALITY          ignore
}

-- *** DedicatedMeasurementTermination ***
dedicatedMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE   DedicatedMeasurementTerminationRequest
    MESSAGE DISCRIMINATOR  dedicated
    PROCEDURE ID         { procedureCode id-dedicatedMeasurementTermination, ddMode common }
    CRITICALITY          ignore
}

-- *** DedicatedMeasurementFailure ***
dedicatedMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE   DedicatedMeasurementFailureIndication
    MESSAGE DISCRIMINATOR  dedicated
    PROCEDURE ID         { procedureCode id-dedicatedMeasurementFailure, ddMode common }
    CRITICALITY          ignore
}

-- *** DLPowerControl (FDD only) ***
downlinkPowerControlFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE   DL-PowerControlRequest
    MESSAGE DISCRIMINATOR  dedicated
    PROCEDURE ID         { procedureCode id-downlinkPowerControl, ddMode fdd }
    CRITICALITY          ignore
}

-- *** DLPowerTimeslotControl (TDD only) ***
downlinkPowerTimeslotControl NBAP-ELEMENTARY-PROCEDURE ::= {
```

```

INITIATING MESSAGE      DL-PowerTimeslotControlRequest
MESSAGE DISCRIMINATOR   dedicated
PROCEDURE ID            { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
CRITICALITY             ignore
}

-- *** CompressedModeCommand (FDD only) ***
compressedModeCommand NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CompressedModeCommand
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-compressedModeCommand, ddMode fdd }
  CRITICALITY             ignore
}

-- *** UnblockResourceIndication ***
unblockResource NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      UnblockResourceIndication
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-unblockResource, ddMode common }
  CRITICALITY             ignore
}

-- *** ErrorIndication for Dedicated procedures ***
errorIndicationForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      ErrorIndication
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-errorIndicationForDedicated, ddMode common }
  CRITICALITY             ignore
}

-- *** ErrorIndication for Common procedures ***
errorIndicationForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      ErrorIndication
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-errorIndicationForCommon, ddMode common }
  CRITICALITY             ignore
}

-- *** CellSynchronisationReporting (TDD only) ***
cellSynchronisationReportingTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CellSynchronisationReportTDD
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-cellSynchronisationReporting, ddMode tdd }
  CRITICALITY             ignore
}

-- *** CellSynchronisationTermination (TDD only) ***
cellSynchronisationTerminationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CellSynchronisationTerminationRequestTDD
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-cellSynchronisationTermination, ddMode tdd }
  CRITICALITY             ignore
}

```

```
-- *** CellSynchronisationFailure (TDD only) ***
cellSynchronisationFailureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellSynchronisationFailureIndicationTDD
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-cellSynchronisationFailure, ddMode tdd }
    CRITICALITY             ignore
}

-- *** PrivateMessage for Dedicated procedures ***
privateMessageForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      PrivateMessage
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-privateMessageForDedicated, ddMode common }
    CRITICALITY             ignore
}

-- *** PrivateMessage for Common procedures ***
privateMessageForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      PrivateMessage
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-privateMessageForCommon, ddMode common }
    CRITICALITY             ignore
}

-- *** InformationReporting ***
informationReporting NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      InformationReport
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-informationReporting, ddMode common }
    CRITICALITY             ignore
}

-- *** InformationExchangeTermination ***
informationExchangeTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      InformationExchangeTerminationRequest
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-informationExchangeTermination, ddMode common }
    CRITICALITY             ignore
}

-- *** InformationExchangeFailure ***
informationExchangeFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      InformationExchangeFailureIndication
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-informationExchangeFailure, ddMode common }
    CRITICALITY             ignore
}

END
```

9.3.3 PDU Definitions

```

-- *****
--
-- PDU definitions for NBAP.
--
-- *****

NBAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
  Active-Pattern-Sequence-Information,
  AddorDeleteIndicator,
  AICH-Power,
  AICH-TransmissionTiming,
  AllocationRetentionPriority,
  APPreambleSignature,
  APSubChannelNumber,
  AvailabilityStatus,
  BCCH-ModificationTime,
  BindingID,
  BlockingPriorityIndicator,
  SCTD-Indicator,
  Cause,
  CCTrCH-ID,
  CDSubChannelNumbers,
  CellParameterID,
  CellSyncBurstAvailabilityIndicator,
  CellSyncBurstCode,
  CellSyncBurstCodeShift,
  CellSyncBurstRepetitionPeriod,
  CellSyncBurstSIR,
  CellSyncBurstTiming,
  CellSyncBurstTimingThreshold,
  CFN,
  Channel-Assignment-Indication,
  ChipOffset,
  C-ID,
  Closedlooptimingadjustmentmode,
  CommonChannelsCapacityConsumptionLaw,

```

Compressed-Mode-Deactivation-Flag,
CommonMeasurementAccuracy,
CommonMeasurementType,
CommonMeasurementValue,
CommonMeasurementValueInformation,
CommonPhysicalChannelID,
Common-PhysicalChannel-Status-Information,
Common-TransportChannel-Status-Information,
CommonTransportChannelID,
CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue,
CriticalityDiagnostics,
CPCH-Allowed-Total-Rate,
CPCHScramblingCodeNumber,
CPCH-UL-DPCCH-SlotFormat,
CRNC-CommunicationContextID,
CSBMeasurementID,
CSBTransmissionID,
DCH-FDD-Information,
DCH-InformationResponse,
DCH-ID,
FDD-DCHs-to-Modify,
TDD-DCHs-to-Modify,
DCH-TDD-Information,
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-or-Global-CapacityCredit,
DL-Power,
DLPowerAveragingWindowSize,
DL-ScramblingCode,
DL-TimeslotISCP,
DL-Timeslot-Information,
DL-TimeslotLCR-Information,
DL-TimeslotISCPInfo,
DL-TimeslotISCPInfoLCR,
DL-TPC-Pattern01Count,
DPC-Mode,
DPCH-ID,
DSCH-ID,
DSCH-FDD-Common-Information,
DSCH-FDD-Information,
DSCH-InformationResponse,
DSCH-TDD-Information,
DwPCH-Power,
End-Of-Audit-Sequence-Indicator,
EnhancedDSCHPC,

EnhancedDSCHPCCounter,
EnhancedDSCHPCIndicator,
EnhancedDSCHPCWid,
EnhancedDSCHPowerOffset,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FPACH-Power,
FrameAdjustmentValue,
FrameHandlingPriority,
FrameOffset,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,
IB-Type,
IndicationType,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
InnerLoopDLPCStatus,
IPDL-FDD-Parameters,
IPDL-TDD-Parameters,
IPDL-Indicator,
LimitedPowerIncrease,
Local-Cell-ID,
MaximumDL-PowerCapability,
MaximumTransmissionPower,
Max-Number-of-PCPCHes,
MaxNrOfUL-DPDCHs,
MaxPRACH-MidambleShifts,
MeasurementFilterCoefficient,
MeasurementID,
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftLCR,
MinimumDL-PowerCapability,
MinSpreadingFactor,
MinUL-ChannelisationCodeLength,
MultiplexingPosition,
NEOT,
NCyclesPerSFNperiod,
NFmax,
NRepetitionsPerCyclePeriod,
N-INSYNC-IND,
N-OUTSYNC-IND,
NeighbouringCellMeasurementInformation,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation,
NodeB-CommunicationContextID,

NStartMessage,
PagingIndicatorLength,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PCP-Length,
PDSCH-CodeMapping,
PDSCHSet-ID,
PDSCH-ID,
PICH-Mode,
PICH-Power,
PowerAdjustmentType,
PowerOffset,
PowerRaiseLimit,
PRACH-Midamble,
PreambleSignatures,
PreambleThreshold,
PredictedSFNSFNDeviationLimit,
PredictedTUTRANGPSDeviationLimit,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
SCH-TimeSlot,
PunctureLimit,
PUSCHSet-ID,
PUSCH-ID,
QE-Selector,
RACH-SlotFormat,
RACH-SubChannelNumbers,
ReferenceClockAvailability,
ReferenceSFNOffset,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
RequestedDataValue,
RequestedDataValueInformation,
ResourceOperationalState,
RL-Set-ID,
RL-ID,
Received-total-wide-band-power-Value,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
RNC-ID,
ScramblingCodeNumber,
SecondaryCCPCH-SlotFormat,
Segment-Type,
S-FieldLength,
SFN,
SFNSFNChangeLimit,
SFNSFNDriftRate,
SFNSFNDriftRateQuality,
SFNSFNQuality,
ShutdownTimer,

SIB-Originator,
SpecialBurstScheduling,
SSDT-Cell-Identity,
SSDT-CellID-Length,
SSDT-Indication,
Start-Of-Audit-Sequence-Indicator,
STTD-Indicator,
SSDT-SupportIndicator,
SyncCase,
SYNCD1CodeId,
SyncFrameNumber,
SynchronisationReportCharacteristics,
SynchronisationReportType,
T-Cell,
T-RLFFAILURE,
TDD-ChannelisationCode,
TDD-ChannelisationCodeLCR,
TDD-DL-Code-LCR-Information,
TDD-DPCHOffset,
TDD-TPC-DownlinkStepSize,
TDD-PhysicalChannelOffset,
TDD-UL-Code-LCR-Information,
TFCI2-BearerInformationResponse,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TFCS,
TimeSlot,
TimeSlotLCR,
TimeSlotDirection,
TimeSlotStatus,
TimingAdjustmentValue,
TimingAdvanceApplied,
ToAWE,
ToAWS,
TransmissionDiversityApplied,
TransmitDiversityIndicator,
TransmissionGapPatternSequenceCodeInformation,
Transmission-Gap-Pattern-Sequence-Information,
TransportBearerRequestIndicator,
TransportFormatSet,
TransportLayerAddress,
TSTD-Indicator,
TUTRANGPS,
TUTRANGPSChangeLimit,
TUTRANGPSDriftRate,
TUTRANGPSDriftRateQuality,
TUTRANGPSQuality,
UARFCN,
UC-Id,
USCH-Information,
USCH-InformationResponse,
UL-CapacityCredit,

```

    UL-DPCCH-SlotFormat,
    UL-SIR,
    UL-FP-Mode,
    UL-PhysCH-SF-Variation,
    UL-ScramblingCode,
    UL-Timeslot-Information,
    UL-TimeslotLCR-Information,
    UL-TimeSlot-ISCP-Info,
    UL-TimeSlot-ISCP-LCR-Info,
    UL-TimeslotISCP-Value,
    UL-TimeslotISCP-Value-IncrDecrThres,
    USCH-ID
FROM NBAP-IEs

    PrivateIE-Container{},
    ProtocolExtensionContainer{},
    ProtocolIE-Container{},
    ProtocolIE-Single-Container{},
    ProtocolIE-ContainerList{},
    NBAP-PRIVATE-IES,
    NBAP-PROTOCOL-IES,
    NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers

    id-Active-Pattern-Sequence-Information,
    id-AdjustmentRatio,
    id-AICH-Information,
    id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
    id-AP-AICH-Information,
    id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
    id-BCH-Information,
    id-BCCH-ModificationTime,
    id-BlockingPriorityIndicator,
    id-Cause,
    id-CauseLevel-PSCH-ReconfFailureTDD,
    id-CauseLevel-RL-AdditionFailureFDD,
    id-CauseLevel-RL-AdditionFailureTDD,
    id-CauseLevel-RL-ReconfFailure,
    id-CauseLevel-RL-SetupFailureFDD,
    id-CauseLevel-RL-SetupFailureTDD,
    id-CauseLevel-SyncAdjustmntFailureTDD,
    id-CCP-InformationItem-AuditRsp,
    id-CCP-InformationList-AuditRsp,
    id-CCP-InformationItem-ResourceStatusInd,
    id-CCTrCH-InformationItem-RL-FailureInd,
    id-CCTrCH-InformationItem-RL-RestoreInd,
    id-CDCA-ICH-Information,
    id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD,
    id-CellAdjustmentInfo-SyncAdjustmntRqstTDD,
    id-CellAdjustmentInfoItem-SyncAdjustmntRqstTDD,
    id-Cell-InformationItem-AuditRsp,
    id-Cell-InformationItem-ResourceStatusInd,
    id-Cell-InformationList-AuditRsp,

```

id-CellParameterID,
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD,
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD,
id-cellSyncBurstRepetitionPeriod,
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD,
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD,
id-CellSyncInfo-CellSyncReprtTDD,
id-CFN,
id-CFNReportingIndicator,
id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD,
id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID,
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-CPCH-Information,
id-CPCH-Parameters-CTCH-SetupRsp,
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-CSBTransmissionID,
id-CSBMeasurementID,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,

id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-TPC-Pattern01Count,
id-DPC-Mode,
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteList-RL-ReconfPrepFDD,
id-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-FDD-Common-Information,
id-DSCH-TDD-Information,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-End-Of-Audit-Sequence-Indicator,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator,
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRqstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstTDD,
id-IndicationType-ResourceStatusInd,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rqst,
id-InformationExchangeObjectType-InfEx-Rsp,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationReportCharacteristics,
id-InformationType,
id-InitDL-Power,

id-InnerLoopDLPCStatus,
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
id-IPDLParameter-Information-Cell-ReconfRqstFDD,
id-IPDLParameter-Information-Cell-SetupRqstFDD,
id-IPDLParameter-Information-Cell-ReconfRqstTDD,
id-IPDLParameter-Information-Cell-SetupRqstTDD,
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
id-Limited-power-increase-information-Cell-SetupRqstFDD,
id-Local-Cell-ID,
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp,
id-Local-Cell-InformationItem-ResourceStatusInd,
id-Local-Cell-InformationItem2-ResourceStatusInd,
id-Local-Cell-InformationList-AuditRsp,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MaximumTransmissionPower,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,
id-NCyclesPerSFNperiod,
id-NeighbouringCellMeasurementInformation,
id-NodeB-CommunicationContextID,
id-NRepetitionsPerCyclePeriod,
id-P-CCPCH-Information,
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRqstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRqstTDD,
id-PCH-Parameters-CTCH-SetupRsp,
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstTDD,
id-PCH-Information,
id-PCPCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRqstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PDSCHSets-AddList-PSCH-ReconfRqst,
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRqstTDD,
id-PICH-ParametersItem-CTCH-SetupRqstTDD,
id-PowerAdjustmentType,
id-PRACH-Information,
id-PRACHConstant,
id-PRACH-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD,

id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRqstFDD,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,
id-PrimarySCH-Information-Cell-SetupRqstFDD,
id-PrimaryScramblingCode,
id-SCH-Information-Cell-ReconfRqstTDD,
id-SCH-Information-Cell-SetupRqstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PUSCHConstant,
id-PUSCHSets-AddList-PSCH-ReconfRqst,
id-PUSCHSets-DeleteList-PSCH-ReconfRqst,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,
id-RACH-ParametersItem-CTCH-SetupRqstFDD,
id-RACH-ParameterItem-CTCH-SetupRqstTDD,
id-ReferenceClockAvailability,
id-ReferenceSFNOffset,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRqstFDD,
id-RL-informationItem-RL-DeletionRqst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
id-RL-InformationItem-RL-RestoreInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-informationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRqstFDD,
id-RL-InformationList-RL-SetupRqstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRqstTDD,

id-RL-Information-RL-ReconfRqstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-S-CCPCH-Information,
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-SecondarySCH-Information-Cell-ReconfRqstFDD,
id-SecondarySCH-Information-Cell-SetupRqstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-SSDT-CellIDforEDSCHPC,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH,
id-SyncFrameNumber,
id-SynchronisationReportType,
id-SynchronisationReportCharacteristics,
id-SyncReportType-CellSyncReprtTDD,
id-T-Cell,
id-TFCI2-Bearer-Information-RL-SetupRqstFDD,
id-TFCI2-BearerInformationResponse,
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-timeslotInfo-CellSyncInitiationRqstTDD,
id-TimeslotISCPInfo,
id-TimingAdvanceApplied,
id-TransmissionDiversityApplied,
id-UARFCNforNt,
id-UARFCNforNd,
id-UARFCNforNu,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,

id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-UL-DPCH-InformationList-RL-SetupRqstTDD,
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD,
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,
id-USCH-Information-Add,
id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
id-USCH-InformationResponse,
id-USCH-Information,
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD,
id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD,
id-DwPCH-LCR-Information,
id-DwPCH-LCR-Information-AuditRsp,
id-DwPCH-LCR-InformationList-AuditRsp,
id-DwPCH-LCR-Information-Cell-SetupRqstTDD,
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD,
id-DwPCH-LCR-Information-ResourceStatusInd,
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD,
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD,
id-FPACH-LCR-Information,
id-FPACH-LCR-Information-AuditRsp,
id-FPACH-LCR-InformationList-AuditRsp,
id-FPACH-LCR-InformationList-ResourceStatusInd,
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD,
id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD,
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD,
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-ReconfRqstTDD,
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD,
id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD,
id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD,

id-RL-InformationResponse-LCR-RL-SetupRspTDD,
id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD,
id-TimeSlot,
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD,
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD,
id-TimeSlotLCR-CM-Rqst,
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD,
id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD,
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD,
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD,
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-LCR-InformationModify-AddList,
id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD,
id-UL-SIRTarget,
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-Info-DM-Rqst,
id-PUSCH-Info-DM-Rsp,
id-PUSCH-Info-DM-Rprt,
id-RL-InformationResponse-LCR-RL-AdditionRspTDD,

maxNrOfCCTrCHs,
maxNrOfCellSyncBursts,
maxNrOfCodes,
maxNrOfCPCHs,
maxNrOfDCHs,
maxNrOfDLTSs,
maxNrOfDLTSLCRs,
maxNrOfDPCHs,
maxNrOfDSCHs,
maxNrOfFACHs,
maxNrOfRRLs,
maxNrOfRRLs-1,
maxNrOfRRLs-2,
maxNrOfRRLSets,
maxNrOfPCPCHs,
maxNrOfPDSCHs,

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maxNrOfPUSCHs,
maxNrOfPRACHLCRs,
maxNrOfPDSCHSets,
maxNrOfPUSCHSets,
maxNrOfReceptsPerSyncFrame,
maxNrOfSCCPCHs,
maxNrOfSCCPCHLCRs,
maxNrOfULTSs,
maxNrOfULTSLCRs,
maxNrOfUSCHs,
maxAPSigNum,
maxCPCHCell,
maxFACHCell,
maxFPACHCell,
maxNoofLen,
maxRACHCell,
maxPCPCHCell,
maxPRACHCell,
maxSCCPCHCell,
maxSCPICHCell,
maxCellinNodeB,
maxCCPinNodeB,
maxCommunicationContext,
maxLocalCellinNodeB,
maxNrOfSlotFormatsPRACH,
maxNrOfCellSyncBursts,
maxNrOfReceptsPerSyncFrame,
maxIB,
maxIBSEG
FROM NBAP-Constants;

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP REQUEST FDD
--
-- *****

CommonTransportChannelSetupRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelSetupRequestFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{CommonTransportChannelSetupRequestFDD-Extensions}}  OPTIONAL,
    ...
}

CommonTransportChannelSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonTransportChannelSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY   reject      TYPE          C-ID
    PRESENCE  mandatory    }|
    { ID      id-ConfigurationGenerationID  CRITICALITY   reject      TYPE          ConfigurationGenerationID
    PRESENCE  mandatory    }|

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    { ID id-CommonPhysicalChannelType-CTCH-SetupRqstFDD CRITICALITY ignore TYPE CommonPhysicalChannelType-CTCH-
SetupRqstFDD PRESENCE mandatory },
    ...
}

CommonPhysicalChannelType-CTCH-SetupRqstFDD ::= CHOICE {
    secondary-CCPCH-parameters Secondary-CCPCH-CTCH-SetupRqstFDD,
    pRACH-parameters PRACH-CTCH-SetupRqstFDD,
    pCPCHes-parameters PCPCH-CTCH-SetupRqstFDD,
    ...
}

Secondary-CCPCH-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    fdd-S-CCPCH-Offset FDD-S-CCPCH-Offset,
    dl-ScramblingCode DL-ScramblingCode OPTIONAL,
    -- This IE shall be present if the PCH Parameters IE is not present
    fdd-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    tFCS TFCS,
    secondary-CCPCH-SlotFormat SecondaryCCPCH-SlotFormat,
    tFCI-Presence TFCI-Presence OPTIONAL,
    -- This IE shall be present if the Secondary CCPCH Slot Format is set to any of the values from 8 to 17
    multiplexingPosition MultiplexingPosition,
    powerOffsetInformation PowerOffsetInformation-CTCH-SetupRqstFDD,
    sTTD-Indicator STTD-Indicator,
    fACH-Parameters FACH-ParametersList-CTCH-SetupRqstFDD OPTIONAL,
    pCH-Parameters PCH-Parameters-CTCH-SetupRqstFDD OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

Secondary-CCPCHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PowerOffsetInformation-CTCH-SetupRqstFDD ::= SEQUENCE {
    pO1-ForTFCI-Bits PowerOffset,
    pO3-ForPilotBits PowerOffset,
    iE-Extensions ProtocolExtensionContainer { { PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-ParametersList-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstFDD }}

FACH-ParametersListIEs-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-SetupRqstFDD CRITICALITY reject TYPE FACH-ParametersListIE-CTCH-SetupRqstFDD PRESENCE mandatory }
}

FACH-ParametersListIE-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstFDD

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FACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    transportFormatSet           TransportFormatSet,
    toAWS                         ToAWS,
    toAWE                         ToAWE,
    maxFACH-Power                DL-Power,
    iE-Extensions                 ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

FACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRqstFDD }}

PCH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersItem-CTCH-SetupRqstFDD    CRITICALITY reject    TYPE PCH-ParametersItem-CTCH-SetupRqstFDD    PRESENCE mandatory }
}

PCH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    transportFormatSet           TransportFormatSet,
    toAWS                         ToAWS,
    toAWE                         ToAWE,
    pCH-Power                    DL-Power,
    pICH-Parameters               PICH-Parameters-CTCH-SetupRqstFDD,
    iE-Extensions                 ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

PCH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    fdd-dl-ChannelisationCodeNumber    FDD-DL-ChannelisationCodeNumber,
    pICH-Power                   PICH-Power,
    pICH-Mode                    PICH-Mode,
    sTTD-Indicator               STTD-Indicator,
    iE-Extensions                 ProtocolExtensionContainer { { PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PRACH-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,

```

```

    scramblingCodeNumber          ScramblingCodeNumber,
    tFCS                          TFCS,
    preambleSignatures            PreambleSignatures,
    allowedSlotFormatInformation  AllowedSlotFormatInformationList-CTCH-SetupRqstFDD,
    rACH-SubChannelNumbers        RACH-SubChannelNumbers,
    ul-punctureLimit              PunctureLimit,
    preambleThreshold             PreambleThreshold,
    rACH-Parameters               RACH-Parameters-CTCH-SetupRqstFDD,
    aICH-Parameters              AICH-Parameters-CTCH-SetupRqstFDD,
    iE-Extensions                 ProtocolExtensionContainer { { PRACHItem-CTCH-SetupRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

PRACHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AllowedSlotFormatInformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD

AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    rACHSlotFormat                RACH-SlotFormat,
    iE-Extensions                 ProtocolExtensionContainer { { AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD-ExtIEs } }
    OPTIONAL,
    ...
}

AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RACH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container { { RACH-ParametersIE-CTCH-SetupRqstFDD } }

RACH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RACH-ParametersItem-CTCH-SetupRqstFDD    CRITICALITY reject    TYPE RACH-ParametersItem-CTCH-SetupRqstFDD    PRESENCE mandatory }
}

RACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    transportFormatSet            TransportFormatSet,
    iE-Extensions                 ProtocolExtensionContainer { { RACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

RACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID       CommonPhysicalChannelID,
    aICH-TransmissionTiming       AICH-TransmissionTiming,
    fdd-dl-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    aICH-Power                     AICH-Power,
}

```

```

    sTTD-Indicator          STTD-Indicator,
    iE-Extensions          ProtocolExtensionContainer { { AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCPCH-CTCH-SetupRqstFDD ::= SEQUENCE {
    cPCH-Parameters          CPCH-Parameters-CTCH-SetupRqstFDD,
    iE-Extensions          ProtocolExtensionContainer { { PCPCHItem-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PCPCHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    transportFormatSet          TransportFormatSet,
    aPPreambleScramblingCode    CPCHScramblingCodeNumber,
    cDPreambleScramblingCode    CPCHScramblingCodeNumber,
    tFCS                        TFCS,
    cDSignatures                PreambleSignatures OPTIONAL,
    cDSubChannelNumbers         CDSUBCHANNELNUMBERS OPTIONAL,
    punctureLimit               PunctureLimit,
    cPCH-UL-DPCCH-SlotFormat    CPCH-UL-DPCCH-SlotFormat,
    uL-SIR                      UL-SIR,
    initialDL-transmissionPower DL-Power,
    maximumDLPower              DL-Power,
    minimumDLPower              DL-Power,
    pO2-ForTPC-Bits             PowerOffset,
    fDD-TPC-DownlinkStepSize    FDD-TPC-DownlinkStepSize,
    nStartMessage               NStartMessage,
    nEOT                        NEOT,
    channel-Assignment-Indication Channel-Assignment-Indication,
    cPCH-Allowed-Total-Rate      CPCH-Allowed-Total-Rate,
    pCPCHChannelInformationList CPCHChannelInformationList-CTCH-SetupRqstFDD,
    vCAMMapping-Information      VCAMMapping-InformationList-CTCH-SetupRqstFDD OPTIONAL,
    -- this IE shall be present if the Channel Assignment Indication is set to "CA Active" --
    aP-AICH-Parameters          AP-AICH-Parameters-CTCH-SetupRqstFDD,
    cDCA-ICH-Parameters         CDCA-ICH-Parameters-CTCH-SetupRqstFDD,
    iE-Extensions          ProtocolExtensionContainer { { CPCH-Parameters-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

CPCH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCPCHChannelInformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfPCPCHs)) OF PCPCHChannelInformationItem-CTCH-SetupRqstFDD

```

```

PCPCHChannelInformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    cPCHScramblingCodeNumber     CPCHScramblingCodeNumber,
    dl-ScramblingCode            DL-ScramblingCode,
    fdd-dl-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    pCP-Length                   PCP-Length,
    uCSM-Information             UCSM-Information-CTCH-SetupRqstFDD      OPTIONAL,
    -- this IE shall be present if the Channel Assignment Indication is equal to "CA Inactive" --
    iE-Extensions                ProtocolExtensionContainer { { PCPCHChannelInformationItem-CTCH-SetupRqstFDD-ExtIEs } }  OPTIONAL,
    ...
}

PCPCHChannelInformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UCSM-Information-CTCH-SetupRqstFDD ::= SEQUENCE {
    minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength,
    nFmax                          NFmax,
    channelRequestParameters       ChannelRequestParametersList-CTCH-SetupRqstFDD      OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { UCSM-InformationItem-CTCH-SetupRqstFDD-ExtIEs } }  OPTIONAL,
    ...
}

UCSM-InformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ChannelRequestParametersList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxAPSigNum)) OF ChannelRequestParametersItem-CTCH-SetupRqstFDD

ChannelRequestParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    aPPreambleSignature           APpreambleSignature,
    aPSubChannelNumber            APSubChannelNumber      OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { ChannelRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs } }  OPTIONAL,
    ...
}

ChannelRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

VCAMMapping-InformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNoofLen)) OF VCAMMapping-InformationItem-CTCH-SetupRqstFDD

VCAMMapping-InformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength,
    nFmax                          NFmax,
    max-Number-of-PCPCHes         Max-Number-of-PCPCHes,
    sFRequestParameters           SFRequestParametersList-CTCH-SetupRqstFDD,
    iE-Extensions                 ProtocolExtensionContainer { { VCAMMapping-InformationItem-CTCH-SetupRqstFDD-ExtIEs } }  OPTIONAL,
    ...
}

```



```

VCAMMapping-InformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFRequestParametersList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxAPSigNum)) OF SFRequestParametersItem-CTCH-SetupRqstFDD

SFRequestParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    aPPreambleSignature      APpreambleSignature,
    aPSubChannelNumber       APSubChannelNumber      OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { SFRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs} }  OPTIONAL,
    ...
}

SFRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AP-AICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    fdd-dl-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
    aP-AICH-Power                AICH-Power,
    cSICH-Power                  AICH-Power,
    sTTD-Indicator               STTD-Indicator,
    iE-Extensions                ProtocolExtensionContainer { { AP-AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }  OPTIONAL,
    ...
}

AP-AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CDCA-ICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    fdd-dl-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
    cDCA-ICH-Power              AICH-Power,
    sTTD-Indicator              STTD-Indicator,
    iE-Extensions                ProtocolExtensionContainer { { CDCA-ICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }  OPTIONAL,
    ...
}

CDCA-ICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP REQUEST TDD
--
-- *****

CommonTransportChannelSetupRequestTDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container   {{CommonTransportChannelSetupRequestTDD-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{CommonTransportChannelSetupRequestTDD-Extensions}}  OPTIONAL,

```

```

}
...
}

CommonTransportChannelSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-C-ID CRITICALITY reject TYPE C-ID
  PRESENCE mandatory }|
  { ID id-ConfigurationGenerationID CRITICALITY reject TYPE ConfigurationGenerationID
  PRESENCE mandatory }|
  { ID id-CommonPhysicalChannelType-CTCH-SetupRqstTDD CRITICALITY ignore TYPE CommonPhysicalChannelType-CTCH-
SetupRqstTDD PRESENCE mandatory },
  ...
}

CommonTransportChannelSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CommonPhysicalChannelType-CTCH-SetupRqstTDD ::= CHOICE {
  secondary-CCPCH-parameters Secondary-CCPCH-CTCH-SetupRqstTDD,
  pRACH-parameters PRACH-CTCH-SetupRqstTDD,
  ...
}

Secondary-CCPCH-CTCH-SetupRqstTDD ::= SEQUENCE {
  sCCPCH-CCTrCH-ID CCTrCH-ID,
  tFCS TFCS,
  tFCI-Coding TFCI-Coding,
  punctureLimit PunctureLimit,
  secondaryCCPCH-parameterList Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD,
  fACH-ParametersList FACH-ParametersList-CTCH-SetupRqstTDD OPTIONAL,
  pCH-Parameters PCH-Parameters-CTCH-SetupRqstTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer {{Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs}} OPTIONAL,
  ...
}

Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION Secondary-CCPCH-LCR-
parameterList-CTCH-SetupRqstTDD PRESENCE optional }, -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
  ...
}

Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD }}

Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD PRESENCE
mandatory } -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
}

Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD

Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  tdd-ChannelisationCode TDD-ChannelisationCode,

```

```

timeslot                               TimeSlot,
midambleShiftandBurstType              MidambleShiftAndBurstType,
tdd-PhysicalChannelOffset              TDD-PhysicalChannelOffset,
repetitionPeriod                       RepetitionPeriod,
repetitionLength                       RepetitionLength,
s-CCPCH-Power                          DL-Power,
iE-Extensions                          ProtocolExtensionContainer { { Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
...
}

Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

FACH-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstTDD }}

FACH-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
{ ID id-FACH-ParametersListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE FACH-ParametersListIE-CTCH-SetupRqstTDD PRESENCE mandatory }
}

FACH-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstTDD

FACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
commonTransportChannelID              CommonTransportChannelID,
fACH-CCTrCH-ID                       CCTrCH-ID,
dl-TransportFormatSet                TransportFormatSet,
toAWS                                 ToAWS,
toAWE                                 ToAWE,
iE-Extensions                          ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
...
}

FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-maxFACH-Power-LCR-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION DL-Power PRESENCE optional },
-- Applicable to For 1.28Mcps TDD only
...
}

PCH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRqstTDD }}

PCH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
{ ID id-PCH-ParametersItem-CTCH-SetupRqstTDD CRITICALITY reject TYPE PCH-ParametersItem-CTCH-SetupRqstTDD PRESENCE mandatory }
}

PCH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
commonTransportChannelID              CommonTransportChannelID,
pCH-CCTrCH-ID                       CCTrCH-ID,
dl-TransportFormatSet                TransportFormatSet,
toAWS                                 ToAWS,
toAWE                                 ToAWE,
pICH-Parameters                      PICH-Parameters-CTCH-SetupRqstTDD,
iE-Extensions                          ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
...
}

```

```

}

PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-PCH-Power-LCR-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION DL-Power PRESENCE optional } |
  -- Applicable to FDD 1.28Mcps TDD only
  { ID id-PICH-LCR-Parameters-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION PICH-LCR-Parameters-CTCH-
SetupRqstTDD PRESENCE optional }, -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
  ...
}

PICH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-SetupRqstTDD }}

PICH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-ParametersItem-CTCH-SetupRqstTDD CRITICALITY reject TYPE PICH-ParametersItem-CTCH-SetupRqstTDD PRESENCE optional }
} -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD

PICH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  tdd-ChannelisationCode TDD-ChannelisationCode,
  timeSlot TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  pagingIndicatorLength PagingIndicatorLength,
  pICH-Power PICH-Power,
  iE-Extensions ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PICH-LCR-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-LCR-ParametersIE-CTCH-SetupRqstTDD }}

PICH-LCR-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD CRITICALITY reject TYPE PICH-LCR-ParametersItem-CTCH-SetupRqstTDD PRESENCE mandatory }
} --- Mandatory for 1.28Mcps TDD

PICH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
  timeSlotLCR TimeSlotLCR,
  midambleShiftLCR MidambleShiftLCR,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  pagingIndicatorLength PagingIndicatorLength,
  pICH-Power PICH-Power,
  iE-Extensions ProtocolExtensionContainer { { PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-LCR-parameterListIEs-CTCH-SetupRqstTDD }}

Secondary-CCPCH-LCR-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD
    PRESENCE optional } --- Mandatory for 1.28Mcps TDD only
}

Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHLCRs)) OF Secondary-CCPCH-LCR-parameterItem-CTCH-
SetupRqstTDD

Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    timeslotLCR TimeSlotLCR,
    midambleShiftLCR MidambleShiftLCR,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
    repetitionPeriod RepetitionPeriod,
    repetitionLength RepetitionLength,
    s-CCPCH-Power DL-Power,
    iE-Extensions ProtocolExtensionContainer { { Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PRACH-CTCH-SetupRqstTDD ::= SEQUENCE {
    prach-Parameters-CTCH-SetupRqstTDD PRACH-Parameters-CTCH-SetupRqstTDD,
    iE-Extensions ProtocolExtensionContainer { { PRACH-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

PRACH-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION PRACH-LCR-ParametersList-CTCH-
    SetupRqstTDD PRESENCE optional } | --- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
    { ID id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION FPACH-LCR-Parameters-CTCH-
    SetupRqstTDD PRESENCE optional }, --- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
    ...
}

PRACH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersIE-CTCH-SetupRqstTDD }}

PRACH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PRACH-ParametersItem-CTCH-SetupRqstTDD CRITICALITY reject TYPE PRACH-ParametersItem-CTCH-SetupRqstTDD PRESENCE optional }
} --- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD

```

```

PRACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    tFCS                          TFCS,
    timeslot                      TimeSlot,
    tdd-ChannelisationCode       TDD-ChannelisationCode,
    maxPRACH-MidambleShifts     MaxPRACH-MidambleShifts,
    pRACH-Midamble               PRACH-Midamble,
    rACH                          RACH-Parameter-CTCH-SetupRqstTDD,
    iE-Extensions                ProtocolExtensionContainer  { { PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RACH-Parameter-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container { { RACH-ParameterIE-CTCH-SetupRqstTDD } }

RACH-ParameterIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-RACH-ParameterItem-CTCH-SetupRqstTDD    CRITICALITY reject    TYPE RACH-ParameterItem-CTCH-SetupRqstTDD    PRESENCE mandatory }
}

RACH-ParameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    uL-TransportFormatSet        TransportFormatSet,
    iE-Extensions                ProtocolExtensionContainer  { { RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PRACH-LCR-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container { { PRACH-LCR-ParametersListIEs-CTCH-SetupRqstTDD } }

PRACH-LCR-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD    CRITICALITY reject    TYPE PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD    PRESENCE
optional }
}

PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfPRACHLCRs)) OF PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD

PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    tFCS                          TFCS,
    timeslotLCR                  TimeSlotLCR,
    tdd-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR,
    maxPRACH-MidambleShifts     MaxPRACH-MidambleShifts,
    pRACH-Midamble               PRACH-Midamble,
    rACH                          RACH-Parameter-CTCH-SetupRqstTDD,
    iE-Extensions                ProtocolExtensionContainer  { { PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

```

```

}

FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FPACH-LCR-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FPACH-LCR-ParametersIE-CTCH-SetupRqstTDD }}

FPACH-LCR-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD    CRITICALITY reject TYPE FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD PRESENCE optional }
}

FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR        TDD-ChannelisationCodeLCR,
    timeslotLCR                      TimeslotLCR,
    midambleShiftLCR                MidambleShiftLCR,
    fPACH-Power                      FPACH-Power,
    iE-Extensions                    ProtocolExtensionContainer { { FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP RESPONSE
--
-- *****

CommonTransportChannelSetupResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelSetupResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelSetupResponse-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersList-CTCH-SetupRsp    CRITICALITY ignore    TYPE    FACH-CommonTransportChannel-InformationResponse    PRESENCE
    optional }|
    { ID id-PCH-Parameters-CTCH-SetupRsp        CRITICALITY ignore    TYPE    CommonTransportChannel-InformationResponse    PRESENCE
    optional }|
    { ID id-RACH-Parameters-CTCH-SetupRsp       CRITICALITY ignore    TYPE    CommonTransportChannel-InformationResponse    PRESENCE
    optional }|
    { ID id-CPCH-Parameters-CTCH-SetupRsp       CRITICALITY ignore    TYPE    CommonTransportChannel-InformationResponse
    PRESENCE optional }|
    { ID id-CriticalityDiagnostics              CRITICALITY ignore    TYPE    CriticalityDiagnostics    PRESENCE
    optional },
    ...
}

CommonTransportChannelSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
FACH-CommonTransportChannel-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF CommonTransportChannel-InformationResponse
-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP FAILURE
--
-- *****

CommonTransportChannelSetupFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelSetupFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelSetupFailure-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-Cause          CRITICALITY ignore    TYPE    Cause          PRESENCE mandatory    }|
    { ID    id-CriticalityDiagnostics    CRITICALITY ignore    TYPE    CriticalityDiagnostics    PRESENCE optional    },
    ...
}

CommonTransportChannelSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST FDD
--
-- *****

CommonTransportChannelReconfigurationRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelReconfigurationRequestFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestFDD-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-C-ID          CRITICALITY reject    TYPE    C-ID          PRESENCE mandatory    }|
    { ID    id-ConfigurationGenerationID    CRITICALITY reject    TYPE    ConfigurationGenerationID    PRESENCE mandatory    }|
    { ID    id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD    CRITICALITY reject    TYPE    CommonPhysicalChannelType-CTCH-ReconfRqstFDD    PRESENCE mandatory    },
    ...
}

CommonTransportChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonPhysicalChannelType-CTCH-ReconfRqstFDD ::= CHOICE {

```



```

secondary-CCPCH-parameters      Secondary-CCPCHList-CTCH-ReconfRqstFDD,
pRACH-parameters                PRACHList-CTCH-ReconfRqstFDD,
cPCH-parameters                 CPCHList-CTCH-ReconfRqstFDD,
...
}

Secondary-CCPCHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
    fACH-ParametersList-CTCH-ReconfRqstFDD    FACH-ParametersList-CTCH-ReconfRqstFDD    OPTIONAL,
    pCH-Parameters-CTCH-ReconfRqstFDD        PCH-Parameters-CTCH-ReconfRqstFDD        OPTIONAL,
    pICH-Parameters-CTCH-ReconfRqstFDD        PICH-Parameters-CTCH-ReconfRqstFDD        OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container { { FACH-ParametersListIEs-CTCH-ReconfRqstFDD } }

FACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-ReconfRqstFDD    CRITICALITY reject    TYPE FACH-ParametersListIE-CTCH-ReconfRqstFDD    PRESENCE mandatory }
}

FACH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxFACHCell)) OF FACH-ParametersItem-CTCH-ReconfRqstFDD

FACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    maxFACH-Power                   DL-Power            OPTIONAL,
    toAWS                            ToAWS              OPTIONAL,
    toAWE                            ToAWE              OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

FACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCH-Parameters-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container { { PCH-ParametersIE-CTCH-ReconfRqstFDD } }

PCH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersItem-CTCH-ReconfRqstFDD    CRITICALITY reject    TYPE PCH-ParametersItem-CTCH-ReconfRqstFDD    PRESENCE mandatory }
}

PCH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    pCH-Power                       DL-Power            OPTIONAL,
    toAWS                            ToAWS              OPTIONAL,
    toAWE                            ToAWE              OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

```

```

PCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PICH-Parameters-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-ReconfRqstFDD }}

PICH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PICH-ParametersItem-CTCH-ReconfRqstFDD CRITICALITY reject TYPE PICH-ParametersItem-CTCH-ReconfRqstFDD PRESENCE mandatory }
}

PICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    pICH-Power                        PICH-Power          OPTIONAL,
    iE-Extensions                     ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PRACHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
    pRACH-ParametersList-CTCH-ReconfRqstFDD PRACH-ParametersList-CTCH-ReconfRqstFDD OPTIONAL,
    aICH-ParametersList-CTCH-ReconfRqstFDD AICH-ParametersList-CTCH-ReconfRqstFDD OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { { PRACH-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PRACH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PRACH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersListIEs-CTCH-ReconfRqstFDD }}

PRACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject TYPE PRACH-ParametersListIE-CTCH-ReconfRqstFDD PRESENCE mandatory }
}

PRACH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF PRACH-ParametersItem-CTCH-ReconfRqstFDD

PRACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    preambleSignatures               PreambleSignatures          OPTIONAL,
    allowedSlotFormatInformation      AllowedSlotFormatInformationList-CTCH-ReconfRqstFDD OPTIONAL,
    rACH-SubChannelNumbers            RACH-SubChannelNumbers          OPTIONAL,
    iE-Extensions                     ProtocolExtensionContainer { { PRACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PRACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

AllowedSlotFormatInformationList-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD

```
AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    rACH-SlotFormat          RACH-SlotFormat,
    iE-Extensions           ProtocolExtensionContainer  { { AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD-ExtIEs} }
    OPTIONAL,
    ...
}
```

```
AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

AICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container { { AICH-ParametersListIEs-CTCH-ReconfRqstFDD } }

```
AICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-AICH-ParametersListIE-CTCH-ReconfRqstFDD    CRITICALITY reject    TYPE AICH-ParametersListIE-CTCH-ReconfRqstFDD    PRESENCE mandatory }
}
```

AICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF AICH-ParametersItem-CTCH-ReconfRqstFDD

```
AICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    aICH-Power                   AICH-Power          OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer  { { AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}
```

```
AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
CPCHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
    cPCH-ParametersList-CTCH-ReconfRqstFDD      CPCH-ParametersList-CTCH-ReconfRqstFDD          OPTIONAL,
    aP-AICH-ParametersList-CTCH-ReconfRqstFDD  AP-AICH-ParametersList-CTCH-ReconfRqstFDD      OPTIONAL,
    cDCA-ICH-ParametersList-CTCH-ReconfRqstFDD CDCA-ICH-ParametersList-CTCH-ReconfRqstFDD      OPTIONAL,
    iE-Extensions                             ProtocolExtensionContainer  { { CPCHListItem-CTCH-ReconfRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}
```

```
CPCHListItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

CPCH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container { { CPCH-ParametersListIEs-CTCH-ReconfRqstFDD } }

```
CPCH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD    CRITICALITY reject    TYPE CPCH-ParametersListIE-CTCH-ReconfRqstFDD    PRESENCE mandatory }
}
```

CPCH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF CPCH-ParametersItem-CTCH-ReconfRqstFDD

```

CPCH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    uL-SIR                        UL-SIR            OPTIONAL,
    initialDL-transmissionPower   DL-Power       OPTIONAL,
    maximumDLPower               DL-Power       OPTIONAL,
    minimumDLPower               DL-Power       OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { CPCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

CPCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AP-AICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ AP-AICH-ParametersListIEs-CTCH-ReconfRqstFDD }}

AP-AICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject TYPE AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD PRESENCE mandatory }
}

AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF AP-AICH-ParametersItem-CTCH-ReconfRqstFDD

AP-AICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    aP-AICH-Power                AICH-Power     OPTIONAL,
    cSICH-Power                  AICH-Power     OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { AP-AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

AP-AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CDCA-ICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ CDCA-ICH-ParametersListIEs-CTCH-ReconfRqstFDD }}

CDCA-ICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject TYPE CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD PRESENCE mandatory }
}

CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF CDCA-ICH-ParametersItem-CTCH-ReconfRqstFDD

CDCA-ICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    cDCA-ICH-Power               AICH-Power     OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { CDCA-ICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

CDCA-ICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}
-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****

CommonTransportChannelReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelReconfigurationRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestTDD-Extensions}} OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID                CRITICALITY reject    TYPE    C-ID
    PRESENCE mandatory }|
    { ID id-ConfigurationGenerationID    CRITICALITY reject    TYPE    ConfigurationGenerationID
    PRESENCE mandatory }|
    { ID id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD    CRITICALITY reject    TYPE    Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD
    PRESENCE optional }|
    { ID id-PICH-Parameters-CTCH-ReconfRqstTDD    CRITICALITY reject    TYPE    PICH-Parameters-CTCH-ReconfRqstTDD    PRESENCE optional }|
    { ID id-FACH-ParametersList-CTCH-ReconfRqstTDD    CRITICALITY reject    TYPE    FACH-ParametersList-CTCH-ReconfRqstTDD    PRESENCE optional }|
    { ID id-PCH-Parameters-CTCH-ReconfRqstTDD    CRITICALITY reject    TYPE    PCH-Parameters-CTCH-ReconfRqstTDD    PRESENCE optional },
    ...
}

CommonTransportChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD    CRITICALITY reject    EXTENSION    FPACH-LCR-Parameters-CTCH-ReconfRqstTDD    PRESENCE
optional }, -- Mandatory For 3-841.28Mcps TDD-only, Not Applicable to 3.84Mcps TDD
    ...
}

Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    secondaryCCPCHList        Secondary-CCPCHList-CTCH-ReconfRqstTDD    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

Secondary-CCPCH-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCHList-CTCH-ReconfRqstTDD ::= ProtocolIE-Single-Container { { Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD } }

Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD    CRITICALITY reject    TYPE    Secondary-CCPCHListIE-CTCH-ReconfRqstTDD    PRESENCE mandatory }
}

Secondary-CCPCHListIE-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCHItem-CTCH-ReconfRqstTDD

Secondary-CCPCHItem-CTCH-ReconfRqstTDD ::= SEQUENCE {

```

```

    commonPhysicalChannelID      CommonPhysicalChannelID,
    sCCPCH-Power                 DL-Power          OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-ReconfRgstTDD-ExtIEs} } OPTIONAL,
    ...
}

Secondary-CCPCHItem-CTCH-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PICH-Parameters-CTCH-ReconfRgstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    pICH-Power                   PICH-Power          OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { PICH-Parameters-CTCH-ReconfRgstTDD-ExtIEs} } OPTIONAL,
    ...
}

PICH-Parameters-CTCH-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-ParametersList-CTCH-ReconfRgstTDD ::= SEQUENCE (SIZE (0..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-ReconfRgstTDD

FACH-ParametersItem-CTCH-ReconfRgstTDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    toAWS                          ToAWS          OPTIONAL,
    toAWE                          ToAWE          OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRgstTDD-ExtIEs} } OPTIONAL,
    ...
}

FACH-ParametersItem-CTCH-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID      id-maxFACH-Power-LCR-CTCH-ReconfRgstTDD      CRITICALITY reject      EXTENSION      DL-Power      PRESENCE      optional },
    -- ForApplicable to 3-841.28Mcps TDD only
    ...
}

PCH-Parameters-CTCH-ReconfRgstTDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    toAWS                          ToAWS          OPTIONAL,
    toAWE                          ToAWE          OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { PCH-Parameters-CTCH-ReconfRgstTDD-ExtIEs} } OPTIONAL,
    ...
}

PCH-Parameters-CTCH-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID      id-PCH-Power-LCR-CTCH-ReconfRgstTDD          CRITICALITY reject      EXTENSION      DL-Power      PRESENCE      optional },
    ... -- ForApplicable to 3-841.28Mcps TDD only
}

FPACH-LCR-Parameters-CTCH-ReconfRgstTDD ::= SEQUENCE {
    commonPhysicalChannelId      CommonPhysicalChannelID,
    fPACHPower                   FPACH-Power      OPTIONAL,

```

```

    iE-Extensions          ProtocolExtensionContainer { { FPACH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

FPACH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE
--
-- *****

CommonTransportChannelReconfigurationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelReconfigurationResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelReconfigurationResponse-Extensions}} OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics      CRITICALITY ignore          TYPE      CriticalityDiagnostics          PRESENCE optional},
    ...
}

CommonTransportChannelReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE
--
-- *****

CommonTransportChannelReconfigurationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelReconfigurationFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelReconfigurationFailure-Extensions}} OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-Cause          CRITICALITY ignore          TYPE      Cause          PRESENCE mandatory }|
    { ID      id-CriticalityDiagnostics      CRITICALITY ignore          TYPE      CriticalityDiagnostics          PRESENCE optional },
    ...
}

CommonTransportChannelReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--

```

```

-- COMMON TRANSPORT CHANNEL DELETION REQUEST
--
-- *****

CommonTransportChannelDeletionRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CommonTransportChannelDeletionRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{CommonTransportChannelDeletionRequest-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID                CRITICALITY reject      TYPE      C-ID                PRESENCE mandatory}|
    { ID      id-CommonPhysicalChannelID  CRITICALITY reject  TYPE      CommonPhysicalChannelID  PRESENCE mandatory}|
    { ID      id-ConfigurationGenerationID CRITICALITY reject  TYPE      ConfigurationGenerationID PRESENCE mandatory},
    ...
}

CommonTransportChannelDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL DELETION RESPONSE
--
-- *****

CommonTransportChannelDeletionResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CommonTransportChannelDeletionResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{CommonTransportChannelDeletionResponse-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics  CRITICALITY ignore   TYPE      CriticalityDiagnostics  PRESENCE optional},
    ...
}

CommonTransportChannelDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- BLOCK RESOURCE REQUEST
--
-- *****

BlockResourceRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{BlockResourceRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{BlockResourceRequest-Extensions}}    OPTIONAL,
    ...
}

```



```

BlockResourceRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-C-ID                CRITICALITY reject      TYPE      C-ID                PRESENCE mandatory }|
  { ID      id-BlockingPriorityIndicator  CRITICALITY reject      TYPE      BlockingPriorityIndicator  PRESENCE mandatory }|
  { ID      id-ShutdownTimer           CRITICALITY reject      TYPE      ShutdownTimer           PRESENCE conditional },
  -- The IE shall be present if the Blocking Priority Indicator IE indicates "Normal Priority"
  ...
}

BlockResourceRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- BLOCK RESOURCE RESPONSE
--
-- *****

BlockResourceResponse ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container      {{BlockResourceResponse-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{BlockResourceResponse-Extensions}}  OPTIONAL,
  ...
}

BlockResourceResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CriticalityDiagnostics  CRITICALITY  ignore      TYPE      CriticalityDiagnostics  PRESENCE optional},
  ...
}

BlockResourceResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- BLOCK RESOURCE FAILURE
--
-- *****

BlockResourceFailure ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container      {{BlockResourceFailure-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{BlockResourceFailure-Extensions}}  OPTIONAL,
  ...
}

BlockResourceFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Cause                CRITICALITY  ignore      TYPE      Cause                PRESENCE mandatory }|
  { ID      id-CriticalityDiagnostics  CRITICALITY  ignore      TYPE      CriticalityDiagnostics  PRESENCE optional },
  ...
}

BlockResourceFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
-- *****
--
-- UNBLOCK RESOURCE INDICATION
--
-- *****

UnblockResourceIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{UnblockResourceIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{UnblockResourceIndication-Extensions}} OPTIONAL,
    ...
}

UnblockResourceIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID      CRITICALITY  ignore      TYPE      C-ID      PRESENCE  mandatory},
    ...
}

UnblockResourceIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- AUDIT REQUIRED INDICATION
--
-- *****

AuditRequiredIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{AuditRequiredIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{AuditRequiredIndication-Extensions}} OPTIONAL,
    ...
}

AuditRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
    ...
}

AuditRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- AUDIT REQUEST
--
-- *****

AuditRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{AuditRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{AuditRequest-Extensions}} OPTIONAL,

```

```

}
...
}
AuditRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Start-Of-Audit-Sequence-Indicator      CRITICALITY      reject      TYPE      Start-Of-Audit-Sequence-Indicator      PRESENCE      mandatory },
  ...
}

AuditRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- AUDIT RESPONSE
--
-- *****

AuditResponse ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{AuditResponse-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{AuditResponse-Extensions}}    OPTIONAL,
  ...
}

AuditResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-End-Of-Audit-Sequence-Indicator      CRITICALITY      ignore      TYPE      End-Of-Audit-Sequence-Indicator      PRESENCE      mandatory }|
  { ID      id-Cell-InformationList-AuditRsp        CRITICALITY      ignore      TYPE      Cell-InformationList-AuditRsp        PRESENCE
  optional    }|
  { ID      id-CCP-InformationList-AuditRsp        CRITICALITY      ignore      TYPE      CCP-InformationList-AuditRsp        PRESENCE      optional
  }|
  -- CCP (Communication Control Port) --
  { ID      id-Local-Cell-InformationList-AuditRsp   CRITICALITY      ignore      TYPE      Local-Cell-InformationList-AuditRsp   PRESENCE
  optional    }|
  { ID      id-Local-Cell-Group-InformationList-AuditRsp CRITICALITY      ignore      TYPE      Local-Cell-Group-InformationList-AuditRsp PRESENCE
  optional    }|
  { ID      id-CriticalityDiagnostics              CRITICALITY      ignore      TYPE      CriticalityDiagnostics              PRESENCE      optional
  },
  ...
}

AuditResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCellInNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-AuditRsp}}

Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID      id-Cell-InformationItem-AuditRsp        CRITICALITY      ignore      TYPE      Cell-InformationItem-AuditRsp        PRESENCE      optional }
}

Cell-InformationItem-AuditRsp ::= SEQUENCE {
  c-ID          C-ID,
  configurationGenerationID ConfigurationGenerationID,

```

```

resourceOperationalState      ResourceOperationalState,
availabilityStatus            AvailabilityStatus,
local-Cell-ID                Local-Cell-ID,
primary-SCH-Information       P-SCH-Information-AuditRsp           OPTIONAL,
secondary-SCH-Information     S-SCH-Information-AuditRsp         OPTIONAL,
primary-CPICH-Information     P-CPICH-Information-AuditRsp       OPTIONAL,
secondary-CPICH-InformationList S-CPICH-InformationList-AuditRsp   OPTIONAL,
primary-CCPCH-Information     P-CCPCH-Information-AuditRsp       OPTIONAL,
bCH-Information              BCH-Information-AuditRsp           OPTIONAL,
secondary-CCPCH-InformationList S-CCPCH-InformationList-AuditRsp   OPTIONAL,
pCH-Information              PCH-Information-AuditRsp           OPTIONAL,
pICH-Information             PICH-Information-AuditRsp         OPTIONAL,
fACH-InformationList         FACH-InformationList-AuditRsp     OPTIONAL,
pRACH-InformationList        PRACH-InformationList-AuditRsp    OPTIONAL,
rACH-InformationList         RACH-InformationList-AuditRsp     OPTIONAL,
aICH-InformationList         AICH-InformationList-AuditRsp     OPTIONAL,
pCPCH-InformationList        PCPCH-InformationList-AuditRsp    OPTIONAL,
cPCH-InformationList         CPCH-InformationList-AuditRsp     OPTIONAL,
aP-AICH-InformationList      AP-AICH-InformationList-AuditRsp  OPTIONAL,
cDCA-ICH-InformationList     CDCA-ICH-InformationList-AuditRsp OPTIONAL,
sCH-Information             SCH-Information-AuditRsp          OPTIONAL,
iE-Extensions               ProtocolExtensionContainer { { Cell-InformationItem-AuditRsp-ExtIEs } } OPTIONAL,
...
}

Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-FPACH-LCR-InformationList-AuditRsp      CRITICALITY ignore EXTENSION FPACH-LCR-InformationList-AuditRsp PRESENCE optional } |
  -- ForApplicable to 1.28Mcps TDD only
  { ID id-DwPCH-LCR-InformationList-AuditRsp      CRITICALITY ignore EXTENSION DwPCH-LCR-InformationList-AuditRsp PRESENCE optional },
  -- ForApplicable to 1.28Mcps TDD only
  ...
}

P-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-AuditRsp }}

P-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-SCH-Information      CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
}

S-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-AuditRsp }}

S-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-SCH-Information      CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
}

P-CPICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-AuditRsp }}

P-CPICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CPICH-Information      CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
}

S-CPICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-AuditRsp }}

```

```

S-CPICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-CPICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CCPCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-AuditRsp }}

P-CCPCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

BCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ BCH-InformationIE-AuditRsp }}

BCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-BCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

S-CCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-AuditRsp }}

S-CCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

PCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PCH-InformationIE-AuditRsp }}

PCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

PICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PICH-InformationIE-AuditRsp }}

PICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

FACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-AuditRsp }}

FACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

PRACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-AuditRsp }}

PRACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

RACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-AuditRsp }}

RACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-AuditRsp }}

```

```

AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

PCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-AuditRsp }}

PCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE optional }
}

CPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-AuditRsp }}

CPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CPCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE optional }
}

AP-AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-AuditRsp }}

AP-AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-AP-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

CDCA-ICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-AuditRsp }}

CDCA-ICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CDCA-ICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ SCH-InformationIE-AuditRsp }}

SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-SCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

CCP-InformationList-AuditRsp ::=SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-AuditRsp }}

CCP-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  {ID id-CCP-InformationItem-AuditRsp          CRITICALITY          ignore          TYPE          CCP-InformationItem-AuditRsp          PRESENCE mandatory}
}

CCP-InformationItem-AuditRsp ::= SEQUENCE {
  communicationControlPortID          CommunicationControlPortID,
  resourceOperationalState             ResourceOperationalState,
  availabilityStatus                   AvailabilityStatus,
  iE-Extensions                        ProtocolExtensionContainer  {{ CCP-InformationItem-AuditRsp-ExtIEs }}          OPTIONAL,
  ...
}

CCP-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

FPACH-LCR-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-AuditRsp }}

```

```

FPACH-LCR-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-FPACH-LCR-Information-AuditRsp  CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

DWPCH-LCR-InformationList-AuditRsp ::= ProtocolIE-Single-Container {{ DWPCH-LCR-InformationIE-AuditRsp }}

DWPCH-LCR-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-DWPCH-LCR-Information-AuditRsp  CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

Local-Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-AuditRsp }}

Local-Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-InformationItem-AuditRsp          CRITICALITY ignore          TYPE          Local-Cell-InformationItem-AuditRsp          PRESENCE mandatory }
}

Local-Cell-InformationItem-AuditRsp ::= SEQUENCE {
  local-Cell-ID          Local-Cell-ID,
  dl-or-global-capacityCredit          DL-or-Global-CapacityCredit,
  ul-capacityCredit          UL-CapacityCredit          OPTIONAL,
  commonChannelsCapacityConsumptionLaw          CommonChannelsCapacityConsumptionLaw,
  dedicatedChannelsCapacityConsumptionLaw          DedicatedChannelsCapacityConsumptionLaw,
  maximumDL-PowerCapability          MaximumDL-PowerCapability          OPTIONAL,
  minSpreadingFactor          MinSpreadingFactor          OPTIONAL,
  minimumDL-PowerCapability          MinimumDL-PowerCapability          OPTIONAL,
  local-Cell-Group-ID          Local-Cell-ID          OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer {{ Local-Cell-InformationItem-AuditRsp-ExtIEs}}          OPTIONAL,
  ...
}

Local-Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-ReferenceClockAvailability          CRITICALITY ignore          EXTENSION ReferenceClockAvailability          PRESENCE optional },
  ...
}

Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-InformationItemIE-AuditRsp }}

Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-Group-InformationItem-AuditRsp          CRITICALITY ignore          TYPE Local-Cell-Group-InformationItem-AuditRsp          PRESENCE mandatory }
}

Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
  local-Cell-Group-ID          Local-Cell-ID,
  dl-or-global-capacityCredit          DL-or-Global-CapacityCredit,
  ul-capacityCredit          UL-CapacityCredit          OPTIONAL,
  commonChannelsCapacityConsumptionLaw          CommonChannelsCapacityConsumptionLaw,
  dedicatedChannelsCapacityConsumptionLaw          DedicatedChannelsCapacityConsumptionLaw,

```

```

    iE-Extensions          ProtocolExtensionContainer  {{ Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}  OPTIONAL,
    ...
}

Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- AUDIT FAILURE
--
-- *****

AuditFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{AuditFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{AuditFailure-Extensions}}  OPTIONAL,
    ...
}

AuditFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-Cause          CRITICALITY    ignore          TYPE    Cause          PRESENCE mandatory
    }|
    { ID    id-CriticalityDiagnostics  CRITICALITY    ignore          TYPE    CriticalityDiagnostics  PRESENCE optional },
    ...
}

AuditFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT INITIATION REQUEST
--
-- *****

CommonMeasurementInitiationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CommonMeasurementInitiationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{CommonMeasurementInitiationRequest-Extensions}}  OPTIONAL,
    ...
}

CommonMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-MeasurementID          CRITICALITY    reject          TYPE    MeasurementID          PRESENCE
    mandatory }|
    { ID    id-CommonMeasurementObjectType-CM-Rqst  CRITICALITY    reject          TYPE    CommonMeasurementObjectType-CM-Rqst  PRESENCE
    mandatory }|
    This IE represents both the Common Measurement Object Type IE and the choice based on the Common Measurement Object Type
    as described in the tabular message format in subclause 9.1.
    { ID    id-CommonMeasurementType          CRITICALITY    reject          TYPE    CommonMeasurementType          PRESENCE mandatory
    }|
}

```



```

{ ID id-MeasurementFilterCoefficient          CRITICALITY reject          TYPE MeasurementFilterCoefficient          PRESENCE
optional }|
{ ID id-ReportCharacteristics                CRITICALITY reject          TYPE ReportCharacteristics                PRESENCE mandatory
}|
{ ID id-SFNReportingIndicator                CRITICALITY reject          TYPE SFNReportingIndicator                PRESENCE mandatory
}|
{ ID id-SFN                                  CRITICALITY reject          TYPE SFN                                  PRESENCE optional
},
...
}

CommonMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
{ID id-CommonMeasurementAccuracy            CRITICALITY reject          EXTENSION CommonMeasurementAccuracy      PRESENCE optional}
}

CommonMeasurementObjectType-CM-Rqst ::= CHOICE {
cell Cell-CM-Rqst,
rACH RACH-CM-Rqst,
cPCH CPCH-CM-Rqst,
...
}

Cell-CM-Rqst ::= SEQUENCE {
c-ID C-ID,
timeSlot TimeSlot OPTIONAL, -- ForApplicable to 3.84Mcps TDD only
iE-Extensions ProtocolExtensionContainer { { CellItem-CM-Rqst-ExtIEs } } OPTIONAL,
...
}

CellItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-TimeSlotLCR-CM-Rqst CRITICALITY reject EXTENSION TimeSlotLCR PRESENCE optional }|
-- ForApplicable to 1.28Mcps TDD only
{ID id-NeighbouringCellMeasurementInformation CRITICALITY ignore EXTENSION NeighbouringCellMeasurementInformation PRESENCE
optional},
...
}

RACH-CM-Rqst ::= SEQUENCE {
c-ID C-ID,
commonTransportChannelID CommonTransportChannelID,
iE-Extensions ProtocolExtensionContainer { { RACHItem-CM-Rqst-ExtIEs } } OPTIONAL,
...
}

RACHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

CPCH-CM-Rqst ::= SEQUENCE {
c-ID C-ID,
commonTransportChannelID CommonTransportChannelID,
spreadingfactor MinUL-ChannelisationCodeLength OPTIONAL,
}

```

```

    iE-Extensions          ProtocolExtensionContainer { { CPCHItem-CM-Rqst-ExtIEs } }          OPTIONAL,
    ...
}

CPCHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT INITIATION RESPONSE
--
-- *****

CommonMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container   {{CommonMeasurementInitiationResponse-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CommonMeasurementInitiationResponse-Extensions}}          OPTIONAL,
    ...
}

CommonMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-MeasurementID          CRITICALITY ignore          TYPE      MeasurementID          PRESENCE
      mandatory }|
    { ID      id-CommonMeasurementObjectType-CM-Rsp  CRITICALITY ignore          TYPE      CommonMeasurementObjectType-CM-Rsp  PRESENCE optional
      }|
    { ID      id-SFN                      CRITICALITY ignore          TYPE      SFN                      PRESENCE
      optional }|
    { ID      id-CriticalityDiagnostics  CRITICALITY ignore          TYPE      CriticalityDiagnostics          PRESENCE optional },
    ...
}

CommonMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...,
    {ID id-CommonMeasurementAccuracy          CRITICALITY ignore          EXTENSION CommonMeasurementAccuracy          PRESENCE optional}
}

CommonMeasurementObjectType-CM-Rsp ::= CHOICE {
    cell          Cell-CM-Rsp,
    rACH          RACH-CM-Rsp,
    cPCH          CPCH-CM-Rsp,
    ...
}

Cell-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue,
    iE-Extensions          ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs } }          OPTIONAL,
    ...
}

CellItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

RACH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue      CommonMeasurementValue,
    IE-Extensions               ProtocolExtensionContainer { { RACHItem-CM-Rsp-ExtIEs } }
    ...
}

RACHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue      CommonMeasurementValue,
    IE-Extensions               ProtocolExtensionContainer { { CPCHItem-CM-Rsp-ExtIEs } }
    ...
}

CPCHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT INITIATION FAILURE
--
-- *****

CommonMeasurementInitiationFailure ::= SEQUENCE {
    protocolIEs                 ProtocolIE-Container   {{CommonMeasurementInitiationFailure-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{CommonMeasurementInitiationFailure-Extensions}}
    ...
}

CommonMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-MeasurementID      CRITICALITY  ignore      TYPE      MeasurementID      PRESENCE mandatory }|
    { ID      id-Cause              CRITICALITY  ignore      TYPE      Cause                PRESENCE mandatory }|
    { ID      id-CriticalityDiagnostics CRITICALITY  ignore      TYPE      CriticalityDiagnostics PRESENCE optional },
    ...
}

CommonMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT REPORT
--
-- *****

CommonMeasurementReport ::= SEQUENCE {
    protocolIEs                 ProtocolIE-Container   {{CommonMeasurementReport-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{CommonMeasurementReport-Extensions}}
    ...
}

```

```

}

CommonMeasurementReport-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-MeasurementID          CRITICALITY ignore          TYPE      MeasurementID          PRESENCE
  mandatory  }|
  { ID      id-CommonMeasurementObjectType-CM-Rprt  CRITICALITY ignore          TYPE      CommonMeasurementObjectType-CM-Rprt  PRESENCE mandatory
  }|
  { ID      id-SFN                      CRITICALITY ignore          TYPE      SFN                      PRESENCE
  optional  },
  ...
}

CommonMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CommonMeasurementObjectType-CM-Rprt ::= CHOICE {
  cell          Cell-CM-Rprt,
  rACH          RACH-CM-Rprt,
  cPCH         CPCH-CM-Rprt,
  ...
}

Cell-CM-Rprt ::= SEQUENCE {
  commonMeasurementValueInformation CommonMeasurementValueInformation,
  iE-Extensions                    ProtocolExtensionContainer {{ CellItem-CM-Rprt-ExtIEs }}          OPTIONAL,
  ...
}

CellItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RACH-CM-Rprt ::= SEQUENCE {
  commonMeasurementValueInformation CommonMeasurementValueInformation,
  iE-Extensions                    ProtocolExtensionContainer {{ RACHItem-CM-Rprt-ExtIEs }}          OPTIONAL,
  ...
}

RACHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CPCH-CM-Rprt ::= SEQUENCE {
  commonMeasurementValueInformation CommonMeasurementValueInformation,
  iE-Extensions                    ProtocolExtensionContainer {{ CPCHItem-CM-Rprt-ExtIEs }}          OPTIONAL,
  ...
}

CPCHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

}

-- *****
--
-- COMMON MEASUREMENT TERMINATION REQUEST
--
-- *****

CommonMeasurementTerminationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonMeasurementTerminationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonMeasurementTerminationRequest-Extensions}}    OPTIONAL,
    ...
}

CommonMeasurementTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-MeasurementID          CRITICALITY ignore          TYPE      MeasurementID          PRESENCE mandatory },
    ...
}

CommonMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT FAILURE INDICATION
--
-- *****

CommonMeasurementFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonMeasurementFailureIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonMeasurementFailureIndication-Extensions}}    OPTIONAL,
    ...
}

CommonMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-MeasurementID          CRITICALITY ignore          TYPE      MeasurementID          PRESENCE mandatory }|
    { ID      id-Cause                  CRITICALITY ignore          TYPE      Cause                PRESENCE mandatory },
    ...
}

CommonMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SETUP REQUEST FDD
--
-- *****

CellSetupRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSetupRequestFDD-IEs}},

```

```

    protocolExtensions      ProtocolExtensionContainer  {{CellSetupRequestFDD-Extensions}}      OPTIONAL,
    ...
}

CellSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Local-Cell-ID          CRITICALITY      reject          TYPE      Local-Cell-ID
    PRESENCE      mandatory    }|
  { ID      id-C-ID                    CRITICALITY      reject          TYPE      C-ID
    PRESENCE      mandatory    }|
  { ID      id-ConfigurationGenerationID  CRITICALITY      reject          TYPE      ConfigurationGenerationID
    PRESENCE      mandatory    }|
  { ID      id-T-Cell                    CRITICALITY      reject          TYPE      T-Cell
    PRESENCE      mandatory    }|
  { ID      id-UARFCNforNu              CRITICALITY      reject          TYPE      UARFCN
    PRESENCE      mandatory    }|
  { ID      id-UARFCNforNd              CRITICALITY      reject          TYPE      UARFCN
    PRESENCE      mandatory    }|
  { ID      id-MaximumTransmissionPower  CRITICALITY      reject          TYPE      MaximumTransmissionPower
    PRESENCE      mandatory    }|
  { ID      id-Closed-Loop-Timing-Adjustment-Mode  CRITICALITY      reject          TYPE
    Closedlooptimingadjustmentmode          PRESENCE      optional    }|
  { ID      id-PrimaryScramblingCode      CRITICALITY      reject          TYPE      PrimaryScramblingCode
    PRESENCE      mandatory    }|
  { ID      id-Synchronisation-Configuration-Cell-SetupRqst  CRITICALITY      reject          TYPE      Synchronisation-
    Configuration-Cell-SetupRqst          PRESENCE      mandatory    }|
  { ID      id-DL-TPC-Pattern01Count      CRITICALITY      reject          TYPE      DL-TPC-Pattern01Count
    PRESENCE      mandatory    }|
  { ID      id-PrimarySCH-Information-Cell-SetupRqstFDD      CRITICALITY      reject          TYPE      PrimarySCH-Information-
    Cell-SetupRqstFDD          PRESENCE      mandatory    }|
  { ID      id-SecondarySCH-Information-Cell-SetupRqstFDD      CRITICALITY      reject          TYPE      SecondarySCH-Information-
    Cell-SetupRqstFDD          PRESENCE      mandatory    }|
  { ID      id-PrimaryCPICH-Information-Cell-SetupRqstFDD      CRITICALITY      reject          TYPE      PrimaryCPICH-Information-
    Cell-SetupRqstFDD          PRESENCE      mandatory    }|
  { ID      id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD  CRITICALITY      reject          TYPE      SecondaryCPICH-
    InformationList-Cell-SetupRqstFDD      PRESENCE      optional    }|
  { ID      id-PrimaryCCPCH-Information-Cell-SetupRqstFDD      CRITICALITY      reject          TYPE      PrimaryCCPCH-Information-
    Cell-SetupRqstFDD          PRESENCE      mandatory    }|
  { ID      id-Limited-power-increase-information-Cell-SetupRqstFDD  CRITICALITY      reject          TYPE      Limited-power-increase-
    information-Cell-SetupRqstFDD          PRESENCE      mandatory    },
  ...
}

CellSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  {ID id-IPDLParameter-Information-Cell-SetupRqstFDD          CRITICALITY      reject          EXTENSION      IPDLParameter-Information-
    Cell-SetupRqstFDD          PRESENCE      optional    },
  ...
}

Synchronisation-Configuration-Cell-SetupRqst ::= SEQUENCE {
  n-INSYNC-IND          N-INSYNC-IND,
  n-OUTSYNC-IND         N-OUTSYNC-IND,
  t-RLFFAILURE          T-RLFFAILURE,
  iE-Extensions         ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-SetupRqst-ExtIEs} }      OPTIONAL,
}

```

```

}
...
Synchronisation-Configuration-Cell-SetupRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
}
...
PrimarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    primarySCH-Power                  DL-Power,
    tSTD-Indicator                     TSTD-Indicator,
    iE-Extensions                      ProtocolExtensionContainer { { PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}
PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
}
...
SecondarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    secondarySCH-Power                DL-Power,
    tSTD-Indicator                     TSTD-Indicator,
    iE-Extensions                      ProtocolExtensionContainer { { SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}
SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
}
...
PrimaryCPICH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    primaryCPICH-Power                 PrimaryCPICH-Power,
    transmitDiversityIndicator         TransmitDiversityIndicator,
    iE-Extensions                      ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}
PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
}
...
SecondaryCPICH-InformationList-Cell-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container{{ SecondaryCPICH-
InformationItemIE-Cell-SetupRqstFDD }}
SecondaryCPICH-InformationItemIE-Cell-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID    id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD    CRITICALITY    reject    TYPE    SecondaryCPICH-
InformationItem-Cell-SetupRqstFDD    PRESENCE    mandatory}
}
SecondaryCPICH-InformationItem-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,

```

```

dl-ScramblingCode          DL-ScramblingCode,
fDD-DL-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
secondaryCPICH-Power       DL-Power,
transmitDiversityIndicator TransmitDiversityIndicator,
iE-Extensions              ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PrimaryCCPCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
commonPhysicalChannelID      CommonPhysicalChannelID,
bCH-information              BCH-Information-Cell-SetupRqstFDD,
sTTD-Indicator               STTD-Indicator,
iE-Extensions                ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

BCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
commonTransportChannelID     CommonTransportChannelID,
bCH-Power                    DL-Power,
iE-Extensions                ProtocolExtensionContainer { { BCH-Information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

BCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

Limited-power-increase-information-Cell-SetupRqstFDD ::= SEQUENCE {
powerRaiseLimit              PowerRaiseLimit,
dLPowerAveragingWindowSize   DLPowerAveragingWindowSize,
iE-Extensions                ProtocolExtensionContainer { { Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

IPDLParameter-Information-Cell-SetupRqstFDD ::= SEQUENCE {
iPDL-FDD-Parameters          IPDL-FDD-Parameters,
iPDL-Indicator                IPDL-Indicator,
iE-Extensions                ProtocolExtensionContainer { { IPDLParameter-Information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

```



```

IPDLParameter-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SETUP REQUEST TDD
--
-- *****

CellSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSetupRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSetupRequestTDD-Extensions}}    OPTIONAL,
    ...
}

CellSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-ID          CRITICALITY reject TYPE Local-Cell-ID
      PRESENCE mandatory }|
    { ID id-C-ID                  CRITICALITY reject TYPE C-ID
      PRESENCE mandatory }|
    { ID id-ConfigurationGenerationID CRITICALITY reject TYPE ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID id-UARFCNforNt           CRITICALITY reject TYPE UARFCN
      PRESENCE mandatory }|
    { ID id-CellParameterID       CRITICALITY reject TYPE CellParameterID
      PRESENCE mandatory }|
    { ID id-MaximumTransmissionPower CRITICALITY reject TYPE MaximumTransmissionPower
      PRESENCE mandatory }|
    { ID id-TransmissionDiversityApplied CRITICALITY reject TYPE TransmissionDiversityApplied
      PRESENCE mandatory }|
    { ID id-SyncCase              CRITICALITY reject TYPE SyncCase
      PRESENCE mandatory }|
    { ID id-Synchronisation-Configuration-Cell-SetupRqst CRITICALITY reject TYPE Synchronisation-Configuration-
      Cell-SetupRqst PRESENCE mandatory }|
    { ID id-DPCHConstant          CRITICALITY reject TYPE ConstantValue
      PRESENCE mandatory }|
    { ID id-PUSCHConstant         CRITICALITY reject TYPE ConstantValue
      PRESENCE mandatory }|
    { ID id-PRACHConstant        CRITICALITY reject TYPE ConstantValue
      PRESENCE mandatory }|
    { ID id-TimingAdvanceApplied CRITICALITY reject TYPE TimingAdvanceApplied
      PRESENCE mandatory }|
    { ID id-SCH-Information-Cell-SetupRqstTDD CRITICALITY reject TYPE SCH-Information-Cell-SetupRqstTDD
      PRESENCE optional }| -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
    { ID id-PCCPCH-Information-Cell-SetupRqstTDD CRITICALITY reject TYPE PCCPCH-Information-Cell-
      SetupRqstTDD PRESENCE optional }| -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
    { ID id-TimeSlotConfigurationList-Cell-SetupRqstTDD CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-
      SetupRqstTDD PRESENCE optional }, -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
    ...
}

```

```

CellSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD      CRITICALITY reject      EXTENSION      TimeSlotConfigurationList-LCR-
Cell-SetupRqstTDD      PRESENCE optional } | -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
  { ID id-PCCPCH-LCR-Information-Cell-SetupRqstTDD            CRITICALITY reject      EXTENSION      PCCPCH-LCR-Information-Cell-
SetupRqstTDD          PRESENCE optional } | -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
  { ID id-DwPCH-LCR-Information-Cell-SetupRqstTDD            CRITICALITY reject      EXTENSION      DwPCH-LCR-Information-Cell-
SetupRqstTDD          PRESENCE optional } | -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
  { ID id-ReferenceSFNoffset      CRITICALITY ignore      EXTENSION ReferenceSFNoffset      PRESENCE optional } |
  { ID id-IPDLParameter-Information-Cell-SetupRqstTDD        CRITICALITY reject      EXTENSION      IPDLParameter-Information-
Cell-SetupRqstTDD    PRESENCE optional },
  ...
}

SCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,
  syncCaseIndicator            SyncCaseIndicator-Cell-SetupRqstTDD-PSCH,
  sCH-Power                    DL-Power,
  tSTD-Indicator                TSTD-Indicator,
  iE-Extensions                ProtocolExtensionContainer { { SCH-Information-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

SCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SyncCaseIndicator-Cell-SetupRqstTDD-PSCH ::= ProtocolIE-Single-Container { { SyncCaseIndicatorIE-Cell-SetupRqstTDD-PSCH } }

SyncCaseIndicatorIE-Cell-SetupRqstTDD-PSCH NBAP-PROTOCOL-IES ::= {
  { ID id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH      CRITICALITY reject      TYPE SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH      PRESENCE
mandatory }
}

SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH ::= CHOICE {
  case1                      Case1-Cell-SetupRqstTDD,
  case2                      Case2-Cell-SetupRqstTDD,
  ...
}

Case1-Cell-SetupRqstTDD ::= SEQUENCE {
  timeSlot                    TimeSlot,
  iE-Extensions                ProtocolExtensionContainer { { Case1Item-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

Case1Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Case2-Cell-SetupRqstTDD ::= SEQUENCE {
  sCH-TimeSlot                SCH-TimeSlot,
  iE-Extensions                ProtocolExtensionContainer { { Case2Item-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
}

```

```

}
...
}
Case2Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PCCPCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
commonPhysicalChannelID          CommonPhysicalChannelID,
tdd-PhysicalChannelOffset        TDD-PhysicalChannelOffset,
repetitionPeriod                 RepetitionPeriod,
repetitionLength                 RepetitionLength,
pCCPCH-Power                     PCCPCH-Power,
sCTD-Indicator                   SCTD-Indicator,
iE-Extensions                    ProtocolExtensionContainer { { PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
...
}

PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

TimeSlotConfigurationList-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-SetupRqstTDD

TimeSlotConfigurationItem-Cell-SetupRqstTDD ::= SEQUENCE {
timeSlot                         TimeSlot,
timeSlotStatus                  TimeSlotStatus,
timeSlotDirection               TimeSlotDirection,
iE-Extensions                   ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
...
}

TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD

TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD ::= SEQUENCE {
timeSlotLCR                     TimeSlotLCR,
timeSlotStatus                  TimeSlotStatus,
timeSlotDirection               TimeSlotDirection,
iE-Extensions                   ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
...
}

TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PCCPCH-LCR-Information-Cell-SetupRqstTDD ::= SEQUENCE {
commonPhysicalChannelID          CommonPhysicalChannelID,

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tdd-PhysicalChannelOffset      TDD-PhysicalChannelOffset,
repetitionPeriod              RepetitionPeriod,
repetitionLength              RepetitionLength,
pCCPCH-Power                  PCCPCH-Power,
sSTD-Indicator                SSTD-Indicator,
tSTD-Indicator                TSTD-Indicator,
iE-Extensions                  ProtocolExtensionContainer { { PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs} }    OPTIONAL,
...
}

PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DwPCH-LCR-Information-Cell-SetupRqstTDD ::= SEQUENCE {
commonPhysicalChannelId      CommonPhysicalChannelID,
tSTD-Indicator                TSTD-Indicator,
sYNCDlCodeId                 SYNCDlCodeId,
dWPCH-Power                   DwPCH-Power,
iE-Extensions                  ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs} }    OPTIONAL,
...
}

DwPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

IPDLParameter-Information-Cell-SetupRqstTDD ::= SEQUENCE {
iPDL-TDD-Parameters           IPDL-TDD-Parameters,
iPDL-Indicator                 IPDL-Indicator,
iE-Extensions                  ProtocolExtensionContainer { { IPDLParameter-Information-Cell-SetupRqstTDD-ExtIEs} }    OPTIONAL,
...
}

IPDLParameter-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- CELL SETUP RESPONSE
--
-- *****

CellSetupResponse ::= SEQUENCE {
protocolIEs                    ProtocolIE-Container    {{CellSetupResponse-IEs}},
protocolExtensions             ProtocolExtensionContainer {{CellSetupResponse-Extensions}}    OPTIONAL,
...
}

CellSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
{ ID      id-CriticalityDiagnostics  CRITICALITY  ignore          TYPE      CriticalityDiagnostics          PRESENCE optional},
...
}

```

```

}

CellSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SETUP FAILURE
--
-- *****

CellSetupFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSetupFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSetupFailure-Extensions}}    OPTIONAL,
    ...
}

CellSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-Cause          CRITICALITY   ignore          TYPE      Cause          PRESENCE mandatory }
    }|
    { ID      id-CriticalityDiagnostics  CRITICALITY   ignore          TYPE      CriticalityDiagnostics  PRESENCE optional },
    ...
}

CellSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL RECONFIGURATION REQUEST FDD
--
-- *****

CellReconfigurationRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellReconfigurationRequestFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellReconfigurationRequestFDD-Extensions}}    OPTIONAL,
    ...
}

CellReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY reject          TYPE      C-ID          PRESENCE mandatory }|
    { ID      id-ConfigurationGenerationID  CRITICALITY reject          TYPE      ConfigurationGenerationID  PRESENCE mandatory }|
    { ID      id-MaximumTransmissionPower  CRITICALITY reject          TYPE      MaximumTransmissionPower  PRESENCE optional }|
    { ID      id-Synchronisation-Configuration-Cell-ReconfRqst  CRITICALITY reject          TYPE      Synchronisation-Configuration-Cell-ReconfRqst  PRESENCE optional }|
    { ID      id-PrimarySCH-Information-Cell-ReconfRqstFDD  CRITICALITY reject          TYPE      PrimarySCH-Information-Cell-ReconfRqstFDD  PRESENCE optional }|
}

```

```

    { ID id-SecondarySCH-Information-Cell-ReconfRqstFDD CRITICALITY reject TYPE SecondarySCH-Information-Cell-
      ReconfRqstFDD PRESENCE optional }|
    { ID id-PrimaryCPICH-Information-Cell-ReconfRqstFDD CRITICALITY reject TYPE PrimaryCPICH-Information-Cell-
      ReconfRqstFDD PRESENCE optional }|
    { ID id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD CRITICALITY reject TYPE SecondaryCPICH-InformationList-
      Cell-ReconfRqstFDD PRESENCE optional }|
    { ID id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD CRITICALITY reject TYPE PrimaryCCPCH-Information-Cell-
      ReconfRqstFDD PRESENCE optional },
    ...
  }

CellReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  {ID id-IPDLParameter-Information-Cell-ReconfRqstFDD CRITICALITY reject EXTENSION IPDLParameter-Information-
  Cell-ReconfRqstFDD PRESENCE optional },
  ...
}

Synchronisation-Configuration-Cell-ReconfRqst ::= SEQUENCE {
  n-INSYNC-IND N-INSYNC-IND,
  n-OUTSYNC-IND N-OUTSYNC-IND,
  t-RLFFAILURE T-RLFFAILURE,
  iE-Extensions ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PrimarySCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  primarySCH-Power DL-Power,
  iE-Extensions ProtocolExtensionContainer { { PrimarySCH-Information-Cell-ReconfRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

PrimarySCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SecondarySCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  secondarySCH-Power DL-Power,
  iE-Extensions ProtocolExtensionContainer { { SecondarySCH-Information-Cell-ReconfRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

SecondarySCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PrimaryCPICH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,

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    primaryCPICH-Power      PrimaryCPICH-Power,
    iE-Extensions           ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SecondaryCPICH-InformationList-Cell-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container{{ SecondaryCPICH-
InformationItemIE-Cell-ReconfRqstFDD }}

SecondaryCPICH-InformationItemIE-Cell-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD      CRITICALITY      reject      TYPE      SecondaryCPICH-
InformationItem-Cell-ReconfRqstFDD      PRESENCE      mandatory}
}

SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    secondaryCPICH-Power         DL-Power,
    iE-Extensions                ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD-ExtIEs } }
    OPTIONAL,
    ...
}

SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PrimaryCCPCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
    bCH-information              BCH-information-Cell-ReconfRqstFDD,
    iE-Extensions                ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

BCH-information-Cell-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID     CommonTransportChannelID,
    bCH-Power                    DL-Power,
    iE-Extensions                ProtocolExtensionContainer { { BCH-information-Cell-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

BCH-information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IPDLParameter-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
    iPDL-FDD-Parameters          IPDL-FDD-Parameters      OPTIONAL,
    iPDL-Indicator               IPDL-Indicator,
}

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```

iE-Extensions          ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstFDD-ExtIEs } } OPTIONAL,
...
}

IPDLParameter-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- CELL RECONFIGURATION REQUEST TDD
--
-- *****

CellReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellReconfigurationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellReconfigurationRequestTDD-Extensions}} OPTIONAL,
    ...
}

CellReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY reject TYPE C-ID
      PRESENCE mandatory }|
    { ID id-ConfigurationGenerationID CRITICALITY reject TYPE ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID id-Synchronisation-Configuration-Cell-ReconfRqst CRITICALITY reject TYPE Synchronisation-Configuration-
      Cell-ReconfRqst PRESENCE optional }|
    { ID id-TimingAdvanceApplied CRITICALITY reject TYPE TimingAdvanceApplied
      PRESENCE optional }| -- Applicable to Fxx 3.84Mcps TDD only
    { ID id-SCH-Information-Cell-ReconfRqstTDD CRITICALITY reject TYPE SCH-Information-Cell-
      ReconfRqstTDD PRESENCE optional }| -- Applicable to Fxx 3.84Mcps TDD only
    { ID id-PCCPCH-Information-Cell-ReconfRqstTDD CRITICALITY reject TYPE PCCPCH-Information-Cell-
      ReconfRqstTDD PRESENCE optional }|
    { ID id-MaximumTransmissionPower CRITICALITY reject TYPE MaximumTransmissionPower
      PRESENCE optional }|
    { ID id-DPCHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE optional }|
    { ID id-PUSCHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE optional }|
    { ID id-PRACHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE optional }|
    { ID id-TimeSlotConfigurationList-Cell-ReconfRqstTDD CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-
      ReconfRqstTDD PRESENCE optional }, -- Applicable to Fxx 3.84Mcps TDD only
    ...
}

CellReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-
      Cell-ReconfRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
    { ID id-DwPCH-LCR-Information-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION DwPCH-LCR-Information-Cell-
      ReconfRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
    { ID id-IPDLParameter-Information-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION IPDLParameter-Information-
      Cell-ReconfRqstTDD PRESENCE optional },

```



```

}
...
}

SCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    sCH-Power                    DL-Power,
    iE-Extensions                ProtocolExtensionContainer { { PSCH-Information-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PSCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCCPCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    pCCPCH-Power                DL-Power,
    iE-Extensions                ProtocolExtensionContainer { { PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-ReconfRqstTDD

TimeSlotConfigurationItem-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlot                    TimeSlot,
    timeSlotStatus              TimeSlotStatus,
    timeSlotDirection           TimeSlotDirection,
    iE-Extensions                ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD

TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR                 TimeSlotLCR,
    timeSlotStatus              TimeSlotStatus,
    timeSlotDirection           TimeSlotDirection,
    iE-Extensions                ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DwPCH-LCR-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelId      CommonPhysicalChannelID,
    dwPCH-Power                  DwPCH-Power,
    iE-Extensions                 ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IPDLParameter-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    iPDL-TDD-Parameters          IPDL-TDD-Parameters OPTIONAL,
    iPDL-Indicator               IPDL-Indicator,
    iE-Extensions                 ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL RECONFIGURATION RESPONSE
--
-- *****

CellReconfigurationResponse ::= SEQUENCE {
    protocolIEs                  ProtocolIE-Container {{CellReconfigurationResponse-IEs}},
    protocolExtensions           ProtocolExtensionContainer {{CellReconfigurationResponse-Extensions}} OPTIONAL,
    ...
}

CellReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics      CRITICALITY      ignore      TYPE      CriticalityDiagnostics      PRESENCE optional},
    ...
}

CellReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL RECONFIGURATION FAILURE
--
-- *****

CellReconfigurationFailure ::= SEQUENCE {
    protocolIEs                  ProtocolIE-Container {{CellReconfigurationFailure-IEs}},
    protocolExtensions           ProtocolExtensionContainer {{CellReconfigurationFailure-Extensions}} OPTIONAL,
    ...
}

```

```

}

CellReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Cause                CRITICALITY  ignore          TYPE      Cause                PRESENCE  mandatory
  }|
  { ID      id-CriticalityDiagnostics CRITICALITY  ignore          TYPE      CriticalityDiagnostics PRESENCE  optional },
  ...
}

CellReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- CELL DELETION REQUEST
--
-- *****

CellDeletionRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{CellDeletionRequest-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{CellDeletionRequest-Extensions}}  OPTIONAL,
  ...
}

CellDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-C-ID                CRITICALITY  reject          TYPE      C-ID                PRESENCE  mandatory},
  ...
}

CellDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- CELL DELETION RESPONSE
--
-- *****

CellDeletionResponse ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{CellDeletionResponse-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{CellDeletionResponse-Extensions}}  OPTIONAL,
  ...
}

CellDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CriticalityDiagnostics CRITICALITY  ignore          TYPE      CriticalityDiagnostics PRESENCE  optional},
  ...
}

CellDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

}

-- *****
--
-- RESOURCE STATUS INDICATION
--
-- *****

ResourceStatusIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{ResourceStatusIndication-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{ResourceStatusIndication-Extensions}}          OPTIONAL,
    ...
}

ResourceStatusIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-IndicationType-ResourceStatusInd      CRITICALITY      ignore          TYPE      IndicationType-ResourceStatusInd      PRESENCE
      mandatory  }|
    This IE represents both the Indication Type IE and the choice based on the indication type as described in the tabular message format in subclause 9.1.
    { ID      id-Cause                                CRITICALITY      ignore          TYPE      Cause                                PRESENCE
      optional  },
    ...
}

ResourceStatusIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IndicationType-ResourceStatusInd ::= CHOICE {
    no-Failure          No-Failure-ResourceStatusInd,
    serviceImpacting   ServiceImpacting-ResourceStatusInd,
    ...
}

No-Failure-ResourceStatusInd ::= SEQUENCE {
    local-Cell-InformationList      Local-Cell-InformationList-ResourceStatusInd,
    local-Cell-Group-InformationList  Local-Cell-Group-InformationList-ResourceStatusInd  OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { No-FailureItem-ResourceStatusInd-ExtIEs} }  OPTIONAL,
    ...
}

No-FailureItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Local-Cell-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-ResourceStatusInd }}

Local-Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-InformationItem-ResourceStatusInd  CRITICALITY ignore  TYPE Local-Cell-InformationItem-ResourceStatusInd  PRESENCE
      mandatory  }
}

```

```

Local-Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
    local-CellID                Local-Cell-ID,
    addorDeleteIndicator        AddorDeleteIndicator,
    dl-or-global-capacityCredit  DL-or-Global-CapacityCredit    OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    ul-capacityCredit           UL-CapacityCredit    OPTIONAL,
    commonChannelsCapacityConsumptionLaw  CommonChannelsCapacityConsumptionLaw    OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw    OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    maximumDL-PowerCapability  MaximumDL-PowerCapability    OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    minSpreadingFactor         MinSpreadingFactor    OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    minimumDL-PowerCapability  MinimumDL-PowerCapability    OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    local-Cell-Group-ID        Local-Cell-ID    OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { Local-Cell-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

Local-Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-FPACH-LCR-InformationList-ResourceStatusInd    CRITICALITY ignore    EXTENSION    FPACH-LCR-InformationList-ResourceStatusInd
    PRESENCE optional } | -- Applicable to Fe-M 1.28Mcps TDD only
    { ID id-DwPCH-LCR-Information-ResourceStatusInd    CRITICALITY ignore    EXTENSION    DwPCH-LCR-Information-ResourceStatusInd    PRESENCE optional
    } | -- Applicable to Fe-M 1.28Mcps TDD only
    { ID id-ReferenceClockAvailability    CRITICALITY    ignore    EXTENSION ReferenceClockAvailability    PRESENCE optional },
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add" and the Local Cell is related to a TDD cell
    ...
}

Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container { { Local-Cell-Group-InformationItemIE-ResourceStatusInd } }

Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-Group-InformationItem-ResourceStatusInd    CRITICALITY ignore TYPE Local-Cell-Group-InformationItem-ResourceStatusInd
    PRESENCE mandatory }
}

Local-Cell-Group-InformationItem-ResourceStatusInd ::= SEQUENCE {
    local-Cell-Group-ID                Local-Cell-ID,
    dl-or-global-capacityCredit          DL-or-Global-CapacityCredit,
    ul-capacityCredit                    UL-CapacityCredit    OPTIONAL,
    commonChannelsCapacityConsumptionLaw  CommonChannelsCapacityConsumptionLaw,
    dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw,
    iE-Extensions                        ProtocolExtensionContainer { { Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

ServiceImpacting-ResourceStatusInd ::= SEQUENCE {
    local-Cell-InformationList          Local-Cell-InformationList2-ResourceStatusInd  OPTIONAL,
    local-Cell-Group-InformationList    Local-Cell-Group-InformationList2-ResourceStatusInd  OPTIONAL,
    cCP-InformationList                 CCP-InformationList-ResourceStatusInd      OPTIONAL,
    cell-InformationList                 Cell-InformationList-ResourceStatusInd   OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { ServiceImpactingItem-ResourceStatusInd-ExtIEs} }  OPTIONAL,
    ...
}

ServiceImpactingItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Local-Cell-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE2-ResourceStatusInd }}

Local-Cell-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-InformationItem2-ResourceStatusInd  CRITICALITY ignore  TYPE Local-Cell-InformationItem2-ResourceStatusInd  PRESENCE mandatory }
}

Local-Cell-InformationItem2-ResourceStatusInd ::= SEQUENCE {
    local-Cell-ID                      Local-Cell-ID,
    dl-or-global-capacityCredit         DL-or-Global-CapacityCredit          OPTIONAL,
    ul-capacityCredit                   UL-CapacityCredit                    OPTIONAL,
    commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw OPTIONAL,
    dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
    maximum-DL-PowerCapability          MaximumDL-PowerCapability             OPTIONAL,
    minSpreadingFactor                  MinSpreadingFactor                   OPTIONAL,
    minimumDL-PowerCapability           MinimumDL-PowerCapability             OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs} }  OPTIONAL,
    ...
}

Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-ReferenceClockAvailability  CRITICALITY ignore  EXTENSION ReferenceClockAvailability  PRESENCE optional },
    ...
}

Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-InformationItemIE2-ResourceStatusInd }}

Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-Group-InformationItem2-ResourceStatusInd  CRITICALITY ignore  TYPE Local-Cell-Group-InformationItem2-ResourceStatusInd  PRESENCE mandatory }
}

Local-Cell-Group-InformationItem2-ResourceStatusInd ::= SEQUENCE {
    local-Cell-Group-ID                Local-Cell-ID,
    dl-or-global-capacityCredit         DL-or-Global-CapacityCredit          OPTIONAL,
    ul-capacityCredit                   UL-CapacityCredit                    OPTIONAL,
    commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw OPTIONAL,
    dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw OPTIONAL,

```

```

    iE-Extensions          ProtocolExtensionContainer { { Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCP-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-ResourceStatusInd }}

CCP-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-CCP-InformationItem-ResourceStatusInd    CRITICALITY ignore    TYPE CCP-InformationItem-ResourceStatusInd    PRESENCE mandatory }
}

CCP-InformationItem-ResourceStatusInd ::= SEQUENCE {
    communicationControlPortID          CommunicationControlPortID,
    resourceOperationalState            ResourceOperationalState,
    availabilityStatus                   AvailabilityStatus,
    iE-Extensions                       ProtocolExtensionContainer { { CCP-InformationItem-ResourceStatusInd-ExtIEs } }    OPTIONAL,
    ...
}

CCP-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Cell-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-ResourceStatusInd }}

Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Cell-InformationItem-ResourceStatusInd    CRITICALITY ignore    TYPE Cell-InformationItem-ResourceStatusInd    PRESENCE mandatory }
}

Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
    c-ID                                C-ID,
    resourceOperationalState            ResourceOperationalState                OPTIONAL,
    availabilityStatus                   AvailabilityStatus                        OPTIONAL,
    primary-SCH-Information               P-SCH-Information-ResourceStatusInd     OPTIONAL, --_FDD only
    secondary-SCH-Information             S-SCH-Information-ResourceStatusInd     OPTIONAL, --_FDD only
    primary-CPICH-Information             P-CPICH-Information-ResourceStatusInd   OPTIONAL, --_FDD only
    secondary-CPICH-Information           S-CPICH-InformationList-ResourceStatusInd OPTIONAL, --_FDD only
    primary-CCPCH-Information             P-CCPCH-Information-ResourceStatusInd   OPTIONAL,
    bCH-Information                       BCH-Information-ResourceStatusInd       OPTIONAL,
    secondary-CCPCH-InformationList       S-CCPCH-InformationList-ResourceStatusInd OPTIONAL,
    pCH-Information                       PCH-Information-ResourceStatusInd       OPTIONAL,
    pICH-Information                       PICH-Information-ResourceStatusInd      OPTIONAL,
    fACH-InformationList                  FACH-InformationList-ResourceStatusInd  OPTIONAL,
    pRACH-InformationList                 PRACH-InformationList-ResourceStatusInd  OPTIONAL,
    rACH-InformationList                  RACH-InformationList-ResourceStatusInd   OPTIONAL,
    aICH-InformationList                  AICH-InformationList-ResourceStatusInd   OPTIONAL, --_FDD only
    pCPCH-InformationList                 PCPCH-InformationList-ResourceStatusInd  OPTIONAL, --_FDD only
    cPCH-InformationList                  CPCH-InformationList-ResourceStatusInd   OPTIONAL, --_FDD only
}

```

```

aP-AICH-InformationList          AP-AICH-InformationList-ResourceStatusInd    OPTIONAL, --_FDD only
cDCA-ICH-InformationList        CDCA-ICH-InformationList-ResourceStatusInd    OPTIONAL, --_FDD only
SCH-Information                  SCH-Information-ResourceStatusInd            OPTIONAL, --_Applicable to 3.84Mcps TDD only
iE-Extensions                    ProtocolExtensionContainer { { Cell-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
...
}

Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

P-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-ResourceStatusInd }}

P-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-SCH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-ResourceStatusInd }}

S-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-SCH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CPICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-ResourceStatusInd }}

P-CPICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-CPICH-Information  CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-CPICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-ResourceStatusInd }}

S-CPICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-CPICH-Information  CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CCPCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-ResourceStatusInd }}

P-CCPCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-CCPCH-Information  CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

BCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ BCH-InformationIE-ResourceStatusInd }}

BCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-BCH-Information      CRITICALITY ignore    TYPE Common-TransportChannel-Status-Information        PRESENCE mandatory }
}

S-CCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-ResourceStatusInd }}

S-CCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-CCPCH-Information  CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

```



```

}

PCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PCH-InformationIE-ResourceStatusInd }}

PCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

PICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PICH-InformationIE-ResourceStatusInd }}

PICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

FACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-ResourceStatusInd }}

FACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

PRACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-ResourceStatusInd }}

PRACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

RACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-ResourceStatusInd }}

RACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-ResourceStatusInd }}

AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

PCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-ResourceStatusInd }}

PCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE optional }
}

CPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-ResourceStatusInd }}

CPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {

```

```

    { ID id-CPCH-Information    CRITICALITY ignore    TYPE Common-TransportChannel-Status-Information    PRESENCE optional }
  }

AP-AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-ResourceStatusInd }}

AP-AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-AP-AICH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information    PRESENCE optional }
}

CDCA-ICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-ResourceStatusInd }}

CDCA-ICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-CDCA-ICH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information    PRESENCE optional }
}

SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ SCH-InformationIE-ResourceStatusInd }}

SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-SCH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information    PRESENCE mandatory }
}

FPACH-LCR-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (0..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-ResourceStatusInd }}

FPACH-LCR-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-FPACH-LCR-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information    PRESENCE mandatory }
}

DwPCH-LCR-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ DwPCH-LCR-InformationIE-ResourceStatusInd }}

DwPCH-LCR-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-DwPCH-LCR-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information    PRESENCE mandatory }
}

-- *****
--
-- SYSTEM INFORMATION UPDATE REQUEST
--
-- *****

SystemInformationUpdateRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{SystemInformationUpdateRequest-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{SystemInformationUpdateRequest-Extensions}}
  ...
}

SystemInformationUpdateRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-C-ID          CRITICALITY reject    TYPE    C-ID
  PRESENCE mandatory }|
  { ID id-BCCH-ModificationTime    CRITICALITY reject    TYPE    BCCH-ModificationTime    PRESENCE optional
  }|
}

```

```

    { ID id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst      CRITICALITY reject      TYPE      MIB-SB-SIB-InformationList-
      SystemInfoUpdateRqst      PRESENCE      mandatory      },
    ...
  }

SystemInformationUpdateRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

MIB-SB-SIB-InformationList-SystemInfoUpdateRqst ::= SEQUENCE (SIZE (1..maxIB)) OF MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst

MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst ::= SEQUENCE {
  iB-Type          IB-Type,
  iB-OC-ID         IB-OC-ID,
  deletionIndicator DeletionIndicator-SystemInfoUpdate,
  iE-Extensions   ProtocolExtensionContainer { { MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst-ExtIEs } }      OPTIONAL,
  ...
}

MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DeletionIndicator-SystemInfoUpdate ::= CHOICE {
  no-Deletion          No-Deletion-SystemInfoUpdate,
  yes-Deletion        NULL
}

No-Deletion-SystemInfoUpdate ::= SEQUENCE {
  sIB-Originator      SIB-Originator          OPTIONAL,
  -- This IE shall be present if the IB-Type IE is set to "SIB"
  iB-SG-REP          IB-SG-REP          OPTIONAL,
  segmentInformationList SegmentInformationList-SystemInfoUpdate,
  iE-Extensions     ProtocolExtensionContainer { { No-DeletionItem-SystemInfoUpdate-ExtIEs } }      OPTIONAL,
  ...
}

No-DeletionItem-SystemInfoUpdate-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SegmentInformationList-SystemInfoUpdate ::= ProtocolIE-Single-Container {{ SegmentInformationListIEs-SystemInfoUpdate }}

SegmentInformationListIEs-SystemInfoUpdate NBAP-PROTOCOL-IES ::= {
  { ID id-SegmentInformationListIE-SystemInfoUpdate      CRITICALITY reject      TYPE SegmentInformationListIE-SystemInfoUpdate      PRESENCE mandatory }
}

SegmentInformationListIE-SystemInfoUpdate ::= SEQUENCE (SIZE (1..maxIBSEG)) OF SegmentInformationItem-SystemInfoUpdate

SegmentInformationItem-SystemInfoUpdate ::= SEQUENCE {
  iB-SG-POS          IB-SG-POS          OPTIONAL,
  segment-Type      Segment-Type      OPTIONAL,

```

```

-- This IE shall be present if the SIB Originator IE is set to "CRNC" or the IB-Type IE is set to "MIB", "SB1" or "SB2"
iB-SG-DATA          IB-SG-DATA          OPTIONAL,
-- This IE shall be present if the SIB Originator IE is set to "CRNC" or the IB-Type IE is set to "MIB", "SB1" or "SB2"
iE-Extensions      ProtocolExtensionContainer { { SegmentInformationItem-SystemInfoUpdate-ExtIEs } } OPTIONAL,
...
}

SegmentInformationItem-SystemInfoUpdate-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- SYSTEM INFORMATION UPDATE RESPONSE
--
-- *****

SystemInformationUpdateResponse ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container   {{SystemInformationUpdateResponse-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{SystemInformationUpdateResponse-Extensions}}           OPTIONAL,
  ...
}

SystemInformationUpdateResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CriticalityDiagnostics      CRITICALITY      ignore          TYPE      CriticalityDiagnostics      PRESENCE optional},
  ...
}

SystemInformationUpdateResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- SYSTEM INFORMATION UPDATE FAILURE
--
-- *****

SystemInformationUpdateFailure ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container   {{SystemInformationUpdateFailure-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{SystemInformationUpdateFailure-Extensions}}           OPTIONAL,
  ...
}

SystemInformationUpdateFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Cause          CRITICALITY      ignore          TYPE      Cause          PRESENCE mandatory
  }|
  { ID      id-CriticalityDiagnostics      CRITICALITY      ignore          TYPE      CriticalityDiagnostics      PRESENCE optional },
  ...
}

SystemInformationUpdateFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

}

-- *****
--
-- RADIO LINK SETUP REQUEST FDD
--
-- *****

RadioLinkSetupRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupRequestFDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupRequestFDD-Extensions}}          OPTIONAL,
    ...
}

RadioLinkSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY reject          TYPE          CRNC-CommunicationContextID
      PRESENCE mandatory }|
    { ID id-UL-DPCH-Information-RL-SetupRqstFDD  CRITICALITY reject          TYPE          UL-DPCH-Information-RL-
      SetupRqstFDD PRESENCE mandatory }|
    { ID id-DL-DPCH-Information-RL-SetupRqstFDD  CRITICALITY reject          TYPE          DL-DPCH-Information-RL-
      SetupRqstFDD PRESENCE mandatory }|
    { ID id-DCH-FDD-Information          CRITICALITY reject          TYPE          DCH-FDD-Information          PRESENCE mandatory }|
    { ID id-DSCH-FDD-Information          CRITICALITY reject          TYPE          DSCH-FDD-Information          PRESENCE optional }|
    { ID id-TFCI2-Bearer-Information-RL-SetupRqstFDD  CRITICALITY ignore          TYPE          TFCI2-Bearer-Information-RL-
      SetupRqstFDD PRESENCE optional }|
    { ID id-RL-InformationList-RL-SetupRqstFDD  CRITICALITY notify          TYPE          RL-InformationList-RL-
      SetupRqstFDD PRESENCE mandatory }|
    { ID id-Transmission-Gap-Pattern-Sequence-Information  CRITICALITY reject          TYPE          Transmission-Gap-Pattern-Sequence-Information
      PRESENCE optional }|
    { ID id-Active-Pattern-Sequence-Information  CRITICALITY reject          TYPE          Active-Pattern-Sequence-Information  PRESENCE
      optional },
    ...
}

RadioLinkSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DSCH-FDD-Common-Information          CRITICALITY ignore          EXTENSION DSCH-FDD-Common-Information          PRESENCE optional
    },
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    ul-ScramblingCode          UL-ScramblingCode,
    minUL-ChannelisationCodeLength  MinUL-ChannelisationCodeLength,
    maxNrOfUL-DPDCHs          MaxNrOfUL-DPDCHs          OPTIONAL,
    -- This IE shall be present if Min UL Channelisation Code length IE is set to 4 --
    ul-PunctureLimit          PunctureLimit,
    tFCS          TFCS,
    ul-DPCCH-SlotFormat          UL-DPCCH-SlotFormat,
    ul-SIR-Target          UL-SIR,
    diversityMode          DiversityMode,
    sSDT-CellID-Length          SSdT-CellID-Length          OPTIONAL,
    s-FieldLength          S-FieldLength          OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
}

```

```

}
...
}
UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  {ID id-DPC-Mode          CRITICALITY reject  EXTENSION  DPC-Mode  PRESENCE optional  },
  ...
}
DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
  tFCS                      TFCS,
  dl-DPCH-SlotFormat        DL-DPCH-SlotFormat,
  tFCI-SignallingMode        TFCI-SignallingMode,
  tFCI-Presence              TFCI-Presence  OPTIONAL,
  -- this IE shall be present if the DL DPCH slot format IE is set to any of the values from 12 to 16 --
  multiplexingPosition      MultiplexingPosition,
  pDSCH-RL-ID               RL-ID          OPTIONAL,
  -- This IE shall be present if the DSCH Information IE is present --
  pDSCH-CodeMapping         PDSCH-CodeMapping  OPTIONAL,
  -- This IE shall be present if the DSCH Information IE is present --
  powerOffsetInformation    PowerOffsetInformation-RL-SetupRqstFDD,
  fdd-TPC-DownlinkStepSize  FDD-TPC-DownlinkStepSize,
  limitedPowerIncrease      LimitedPowerIncrease,
  innerLoopDLPCStatus       InnerLoopDLPCStatus,
  iE-Extensions             ProtocolExtensionContainer { { DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
  ...
}
DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
PowerOffsetInformation-RL-SetupRqstFDD ::= SEQUENCE {
  pO1-ForTFCI-Bits          PowerOffset,
  pO2-ForTPC-Bits           PowerOffset,
  pO3-ForPilotBits          PowerOffset,
  iE-Extensions             ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
  ...
}
PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
TFCI2-Bearer-Information-RL-SetupRqstFDD ::= SEQUENCE {
  toAWS                      ToAWS,
  toAWE                      ToAWE,
  iE-Extensions             ProtocolExtensionContainer { { TFCI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
  ...
}
TFCI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

RL-InformationList-RL-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF
 ProtocolIE-Single-Container{{ RL-InformationItemIE-RL-SetupRqstFDD }}

RL-InformationItemIE-RL-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
 { ID id-RL-InformationItem-RL-SetupRqstFDD CRITICALITY notify TYPE RL-InformationItem-RL-
 SetupRqstFDD PRESENCE mandatory}

RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
 rL-ID RL-ID,
 c-ID C-ID,
 firstRLS-indicator FirstRLS-Indicator,
 frameOffset FrameOffset,
 chipOffset ChipOffset,
 propagationDelay PropagationDelay OPTIONAL,
 diversityControlField DiversityControlField OPTIONAL,
 -- This IE shall be present if the RL is not the first one in the RL Information IE
 dl-CodeInformation FDD-DL-CodeInformation,
 initialDL-transmissionPower DL-Power,
 maximumDL-power DL-Power,
 minimumDL-power DL-Power,
 sSDT-Cell-Identity SSdT-Cell-Identity OPTIONAL,
 transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
 -- This IE shall be present if Diversity Mode IE in UL DPCH Information group is not set to "none"
 iE-Extensions ProtocolExtensionContainer { { RL-InformationItem-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
 ...
 }

RL-InformationItem-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 { ID id-SSDT-CellIDforEDSCHPC CRITICALITY ignore EXTENSION SSdT-Cell-Identity PRESENCE conditional },
 -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Common Information IE.
 ...
 }

-- *****
 --
 -- RADIO LINK SETUP REQUEST TDD
 --
 -- *****

RadioLinkSetupRequestTDD ::= SEQUENCE {
 protocolIEs ProtocolIE-Container {{RadioLinkSetupRequestTDD-IEs}},
 protocolExtensions ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}} OPTIONAL,
 ...
 }

RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
 { ID id-CRNC-CommunicationContextID CRITICALITY reject TYPE CRNC-CommunicationContextID
 PRESENCE mandatory }|
 { ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationList-RL-
 SetupRqstTDD PRESENCE optional }|

```

{ ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationList-RL-
SetupRqstTDD PRESENCE optional }|
{ ID id-DCH-TDD-Information CRITICALITY reject TYPE DCH-TDD-Information PRESENCE optional }|
{ ID id-DSCH-TDD-Information CRITICALITY reject TYPE DSCH-TDD-Information PRESENCE optional }|
{ ID id-USCH-Information CRITICALITY reject TYPE USCH-Information PRESENCE optional }|
{ ID id-RL-Information-RL-SetupRqstTDD CRITICALITY reject TYPE RL-Information-RL-SetupRqstTDD
PRESENCE mandatory },
...
}

RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
ProtocolIE-Single-Container{{ UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
{ ID id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationItem-RL-
SetupRqstTDD PRESENCE mandatory}
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
cCTrCH-ID cCTrCH-ID,
tFCS TFCS,
tFCI-Coding TFCI-Coding,
punctureLimit PunctureLimit,
uL-DPCH-Information UL-DPCH-Information-RL-SetupRqstTDD OPTIONAL, -- Applicable to For 3.84Mcps TDD only
iE-Extensions ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-UL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify EXTENSION UL-DPCH-LCR-Information-RL-SetupRqstTDD PRESENCE optional
}| -- Applicable to For 1.28Mcps TDD only
{ ID id-UL-SIRTarget CRITICALITY reject EXTENSION UL-SIR PRESENCE optional },
-- This IE shall be mandatory for 1.28Mcps TDD, anot applicable for 3.84Mcps TDD.
...
}

UL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
{ ID id-UL-DPCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE UL-DPCH-InformationItem-RL-SetupRqstTDD PRESENCE mandatory }
}

UL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
repetitionPeriod RepetitionPeriod,
repetitionLength RepetitionLength,
tdd-DPCHOffset TDD-DPCHOffset,
uL-Timeslot-Information UL-Timeslot-Information,
iE-Extensions ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
...
}

```



```

}

UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD      CRITICALITY notify   TYPE UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD      PRESENCE
optional      }
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    uL-TimeslotLCR-Information UL-TimeslotLCR-Information,
    iE-Extensions             ProtocolExtensionContainer { { UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container{{ DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD      CRITICALITY   notify           TYPE DL-CCTrCH-InformationItem-RL-SetupRqstTDD      PRESENCE mandatory}
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID              CCTrCH-ID,
    tFCS                   TFCS,
    tFCI-Coding            TFCI-Coding,
    punctureLimit          PunctureLimit,
    tdd-TPC-DownlinkStepSize TDD-TPC-DownlinkStepSize,
    cCTrCH-TPCList         CCTrCH-TPCList-RL-SetupRqstTDD      OPTIONAL,
    dL-DPCH-Information    DL-DPCH-Information-RL-SetupRqstTDD  OPTIONAL, -- Applicable to Fo 3.84Mcps TDD only
    iE-Extensions         ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify     EXTENSION DL-DPCH-LCR-Information-RL-SetupRqstTDD PRESENCE optional
}, -- Applicable to Fo 1.28Mcps TDD only
    ...
}

CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD

```

```

CCTrCH-TPCItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    iE-Extensions      ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationList-RL-SetupRqstTDD      CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-SetupRqstTDD      PRESENCE mandatory }
}

DL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dL-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD      CRITICALITY notify TYPE DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD      PRESENCE
mandatory }
}

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dL-TimeslotLCR-Information DL-TimeslotLCR-Information,
    tstdIndicator         TSTD-Indicator,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
    rL-ID          RL-ID,

```

```

c-ID,
frameOffset,
specialBurstScheduling,
initialDL-transmissionPower,
maximumDL-power,
minimumDL-power,
dL-TimeslotISCPInfo,
iE-Extensions
...
}

RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD CRITICALITY reject EXTENSION TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD PRESENCE optional }, -- Applicable to FDD 1.28Mcps TDD only
  ...
}

TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD ::= SEQUENCE {
  dL-TimeslotISCP-LCR-Info DL-TimeslotISCPInfoLCR,
  iE-Extensions ProtocolExtensionContainer { {TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK SETUP RESPONSE FDD
--
-- *****

RadioLinkSetupResponseFDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkSetupResponseFDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkSetupResponseFDD-Extensions}} OPTIONAL,
  ...
}

RadioLinkSetupResponseFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID CRITICALITY ignore TYPE CRNC-CommunicationContextID PRESENCE mandatory }|
  { ID id-NodeB-CommunicationContextID CRITICALITY ignore TYPE NodeB-CommunicationContextID PRESENCE mandatory }|
  { ID id-CommunicationControlPortID CRITICALITY ignore TYPE CommunicationControlPortID PRESENCE mandatory }|
  { ID id-RL-InformationResponseList-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseList-RL-SetupRspFDD PRESENCE mandatory }|
  { ID id-TFCI2-BearerInformationResponse CRITICALITY ignore TYPE TFCI2-BearerInformationResponse PRESENCE optional }|
  { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

```

```

RadioLinkSetupResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container{{ RL-InformationResponseItemIE-RL-SetupRspFDD }}

RL-InformationResponseItemIE-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseItem-RL-SetupRspFDD PRESENCE mandatory}
}

RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID RL-ID,
    rL-Set-ID RL-Set-ID,
    received-total-wide-band-power Received-total-wide-band-power-Value,
    diversityIndication DiversityIndication-RL-SetupRspFDD,
    This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in the tabular message format in subclause 9.1.
    dSCH-InformationResponseList DSCH-InformationResponseList-RL-SetupRspFDD OPTIONAL,
    sSDT-SupportIndicator SSDT-SupportIndicator,
    iE-Extensions ProtocolExtensionContainer { { RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-SetupRspFDD ::= CHOICE {
    combining Combining-RL-SetupRspFDD,
    nonCombiningOrFirstRL NonCombiningOrFirstRL-RL-SetupRspFDD
}

Combining-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID RL-ID,
    iE-Extensions ProtocolExtensionContainer { { Combining-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

Combining-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

NonCombiningOrFirstRL-RL-SetupRspFDD ::= SEQUENCE {
    dCH-InformationResponse DCH-InformationResponse,
    iE-Extensions ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

DSCH-InformationResponseList-RL-SetupRspFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupRspFDD }}

DSCH-InformationResponseListIEs-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationResponse  CRITICALITY ignore  TYPE DSCH-InformationResponse  PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK SETUP RESPONSE TDD
--
-- *****

RadioLinkSetupResponseTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkSetupResponseTDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupResponseTDD-Extensions}}          OPTIONAL,
  ...
}

RadioLinkSetupResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID  CRITICALITY ignore  TYPE CRNC-CommunicationContextID
    PRESENCE mandatory }|
  { ID id-NodeB-CommunicationContextID  CRITICALITY ignore  TYPE NodeB-CommunicationContextID
    PRESENCE mandatory }|
  { ID id-CommunicationControlPortID  CRITICALITY ignore  TYPE CommunicationControlPortID
    PRESENCE mandatory }|
  { ID id-RL-InformationResponse-RL-SetupRspTDD  CRITICALITY ignore  TYPE RL-InformationResponse-RL-
SetupRspTDD  PRESENCE optional }| -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
  { ID id-CriticalityDiagnostics  CRITICALITY ignore  TYPE CriticalityDiagnostics
    PRESENCE optional },
  ...
}

RadioLinkSetupResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-RL-InformationResponse-LCR-RL-SetupRspTDD  CRITICALITY ignore  EXTENSION RL-
InformationResponse-LCR-RL-SetupRspTDD  PRESENCE optional }, -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
  ...
}

RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
  rL-ID          RL-ID,
  uL-TimeSlot-ISCP-Info  UL-TimeSlot-ISCP-Info,
  ul-PhysCH-SF-Variation  UL-PhysCH-SF-Variation,
  dCH-InformationResponseList  DCH-InformationResponseList-RL-SetupRspTDD          OPTIONAL,
  dSCH-InformationResponseList  DSCH-InformationResponseList-RL-SetupRspTDD          OPTIONAL,
  uSCH-InformationResponseList  USCH-InformationResponseList-RL-SetupRspTDD          OPTIONAL,
  iE-Extensions  ProtocolExtensionContainer { { RL-InformationResponseList-RL-SetupRspTDD-ExtIEs } }  OPTIONAL,
  ...
}

RL-InformationResponseList-RL-SetupRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

}

DCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container{{ DCH-InformationResponseListIEs-RL-SetupRspTDD }}

DCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE mandatory }
}

DSCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupRspTDD }}

DSCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationResponse CRITICALITY ignore TYPE DSCH-InformationResponse PRESENCE mandatory }
}

USCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-SetupRspTDD }}

USCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
  { ID id-USCH-InformationResponse CRITICALITY ignore TYPE USCH-InformationResponse PRESENCE mandatory }
}

RL-InformationResponse-LCR-RL-SetupRspTDD ::= SEQUENCE {
  rL-ID RL-ID,
  uL-TimeSlot-ISCP-LCR-Info UL-TimeSlot-ISCP-LCR-Info,
  ul-PhysCH-SF-Variation UL-PhysCH-SF-Variation,
  dCH-InformationResponseList DCH-InformationResponseList-RL-SetupRspTDD OPTIONAL,
  dSCH-InformationResponseList DSCH-InformationResponseList-RL-SetupRspTDD OPTIONAL,
  uSCH-InformationResponseList USCH-InformationResponseList-RL-SetupRspTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { RL-InformationResponseList-LCR-RL-SetupRspTDD-ExtIEs } }
  OPTIONAL,
  ...
}

RL-InformationResponseList-LCR-RL-SetupRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK SETUP FAILURE FDD
--
-- *****

RadioLinkSetupFailureFDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkSetupFailureFDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}} OPTIONAL,
  ...
}

RadioLinkSetupFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID CRITICALITY ignore TYPE CRNC-
CommunicationContextID PRESENCE mandatory }|
  { ID id-NodeB-CommunicationContextID CRITICALITY ignore TYPE NodeB-
CommunicationContextID PRESENCE conditional }|
}

```

```

-- This IE shall be present if at least one of the radio links has been successfully set up
{ ID id-CommunicationControlPortID      CRITICALITY ignore      TYPE
CommunicationControlPortID              PRESENCE   optional   }|
{ ID id-CauseLevel-RL-SetupFailureFDD    CRITICALITY ignore      TYPE CauseLevel-RL-
SetupFailureFDD PRESENCE mandatory }|
{ ID id-CriticalityDiagnostics           CRITICALITY ignore      TYPE
CriticalityDiagnostics                   PRESENCE   optional   },
...
}

RadioLinkSetupFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

CauseLevel-RL-SetupFailureFDD ::= CHOICE {
  generalCause      GeneralCauseList-RL-SetupFailureFDD,
  rLSpecificCause   RLSpecificCauseList-RL-SetupFailureFDD,
  ...
}

GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE {
  cause              Cause,
  iE-Extensions      ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

GeneralCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
  unsuccessful-RL-InformationRespList-RL-SetupFailureFDD      Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD,
  successful-RL-InformationRespList-RL-SetupFailureFDD        Successful-RL-InformationRespList-RL-SetupFailureFDD OPTIONAL,
  iE-Extensions                                                ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}

Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD      CRITICALITY ignore      TYPE Unsuccessful-RL-
InformationRespItem-RL-SetupFailureFDD PRESENCE mandatory}
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID      RL-ID,
  cause      Cause,
}

```

```

    iE-Extensions
    OPTIONAL,
    ...
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Successful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1.. maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}

Successful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-Successful-RL-InformationRespItem-RL-SetupFailureFDD      CRITICALITY      ignore      TYPE      Successful-RL-
InformationRespItem-RL-SetupFailureFDD      PRESENCE      mandatory}
}

Successful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    rL-Set-ID            RL-Set-ID,
    received-total-wide-band-power          Received-total-wide-band-power-Value,
    diversityIndication          DiversityIndication-RL-SetupFailureFDD,
    This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    the tabular message format in subclause 9.1.
    dSCH-InformationResponseList          DSCH-InformationRespList-RL-SetupFailureFDD      OPTIONAL,
    tFCI2-BearerInformationResponse          TFCI2-BearerInformationResponse      OPTIONAL,
    sSDT-SupportIndicator          SSDT-SupportIndicator,
    iE-Extensions          ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs } }
    OPTIONAL,
    ...
}

Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-SetupFailureFDD ::= CHOICE {
    combining          Combining-RL-SetupFailureFDD,
    nonCombiningOrFirstRL          NonCombiningOrFirstRL-RL-SetupFailureFDD
}

Combining-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    iE-Extensions          ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs } }      OPTIONAL,
    ...
}

CombiningItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE {
    dCH-InformationResponse          DCH-InformationResponse,

```



```

    iE-Extensions          ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs} }
    OPTIONAL,
    ...
}

NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-InformationRespList-RL-SetupFailureFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationRespListIEs-RL-SetupFailureFDD }}

DSCH-InformationRespListIEs-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationResponse    CRITICALITY ignore    TYPE DSCH-InformationResponse    PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK SETUP FAILURE TDD
--
-- *****

RadioLinkSetupFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupFailureTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupFailureTDD-Extensions}}          OPTIONAL,
    ...
}

RadioLinkSetupFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore    TYPE          CRNC-CommunicationContextID
      PRESENCE mandatory }|
    { ID id-CauseLevel-RL-SetupFailureTDD          CRITICALITY ignore    TYPE CauseLevel-RL-
SetupFailureTDD PRESENCE mandatory }|
    { ID id-CriticalityDiagnostics          CRITICALITY ignore    TYPE          CriticalityDiagnostics
      PRESENCE optional },
    ...
}

RadioLinkSetupFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CauseLevel-RL-SetupFailureTDD ::= CHOICE {
    generalCause          GeneralCauseList-RL-SetupFailureTDD,
    rLSpecificCause      RLSpecificCauseList-RL-SetupFailureTDD,
    ...
}

GeneralCauseList-RL-SetupFailureTDD ::= SEQUENCE {
    cause          Cause,
    iE-Extensions ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureTDD-ExtIEs} }          OPTIONAL,
    ...
}

```

```

GeneralCauseItem-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-SetupFailureTDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD
    iE-Extensions
    OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD} }

Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD CRITICALITY ignore TYPE Unsuccessful-RL-InformationResp-RL-SetupFailureTDD PRESENCE mandatory }
}

Unsuccessful-RL-InformationResp-RL-SetupFailureTDD ::= SEQUENCE {
    rL-ID RL-ID,
    cause Cause,
    iE-Extensions ProtocolExtensionContainer { { Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs } }
    OPTIONAL,
    ...
}

Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK ADDITION REQUEST FDD
--
-- *****

RadioLinkAdditionRequestFDD ::= SEQUENCE {
    protocolIEs ProtocolIE-Container {{RadioLinkAdditionRequestFDD-IEs}},
    protocolExtensions ProtocolExtensionContainer {{RadioLinkAdditionRequestFDD-Extensions}} OPTIONAL,
    ...
}

RadioLinkAdditionRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID CRITICALITY reject TYPE NodeB-CommunicationContextID PRESENCE mandatory } |
    { ID id-Compressed-Mode-Deactivation-Flag CRITICALITY reject TYPE Compressed-Mode-Deactivation-Flag PRESENCE optional } |
    { ID id-RL-InformationList-RL-AdditionRqstFDD CRITICALITY notify TYPE RL-InformationList-RL-AdditionRqstFDD PRESENCE mandatory },
}

```

```

}
...
RadioLinkAdditionRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
}
...
RL-InformationList-RL-AdditionRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-AdditionRqstFDD}}

RL-InformationItemIE-RL-AdditionRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-RL-AdditionRqstFDD CRITICALITY notify TYPE RL-InformationItem-RL-AdditionRqstFDD PRESENCE mandatory}
}

RL-InformationItem-RL-AdditionRqstFDD ::= SEQUENCE {
  rL-ID RL-ID,
  c-ID C-ID,
  frameOffset FrameOffset,
  chipOffset ChipOffset,
  diversityControlField DiversityControlField,
  dl-CodeInformation FDD-DL-CodeInformation,
  initialDL-TransmissionPower DL-Power OPTIONAL,
  maximumDL-Power DL-Power OPTIONAL,
  minimumDL-Power DL-Power OPTIONAL,
  sSDT-CellIdentity SSdT-Cell-Identity OPTIONAL,
  transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { RL-InformationItem-RL-AdditionRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationItem-RL-AdditionRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
}
...
-- *****
--
-- RADIO LINK ADDITION REQUEST TDD
--
-- *****

RadioLinkAdditionRequestTDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkAdditionRequestTDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-Extensions}} OPTIONAL,
  ...
}

RadioLinkAdditionRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID CRITICALITY reject TYPE NodeB-CommunicationContextID PRESENCE mandatory }|
  { ID id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD CRITICALITY reject TYPE UL-CCTrCH-InformationList-RL-AdditionRqstTDD PRESENCE optional }|
}

```

```

    { ID      id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD
      RL-AdditionRqstTDD          PRESENCE optional } |
    { ID      id-RL-Information-RL-AdditionRqstTDD
      AdditionRqstTDD              PRESENCE mandatory },
    ...
}

RadioLinkAdditionRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-AdditionRqstTDD

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    uL-DPCH-Information      UL-DPCH-InformationList-RL-AdditionRqstTDD OPTIONAL, -- Applicable to 3.84cps TDD only
    iE-Extensions            ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
    { ID      id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD          CRITICALITY notify          EXTENSION UL-DPCH-
      InformationItem-LCR-RL-AdditionRqstTDD          PRESENCE optional }, -- Applicable to For 1.28cps TDD only
    }
}

UL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationItemIE-RL-AdditionRqstTDD } }

UL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-UL-DPCH-InformationItem-RL-AdditionRqstTDD          CRITICALITY notify          TYPE UL-DPCH-InformationItem-RL-
      AdditionRqstTDD          PRESENCE optional } -- For 3.84Mcps TDD only
    }
}

UL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    uL-Timeslot-Information    UL-Timeslot-Information,
    iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-AdditionRqstTDD

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    dL-DPCH-Information      DL-DPCH-InformationList-RL-AdditionRqstTDD OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

}

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD CRITICALITY notify EXTENSION DL-DPCH-
InformationItem-LCR-RL-AdditionRqstTDD PRESENCE optional }, -- Applicable to Fxx 1.28Mcps TDD only
  ...
}

DL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}

DL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationItem-RL-AdditionRqstTDD CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-
AdditionRqstTDD PRESENCE mandatory} -- Applicable to Fxx 3.84Mcps TDD only
}

DL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-DPCHOffset TDD-DPCHOffset,
  dL-Timeslot-Information DL-Timeslot-Information,
  iE-Extensions ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Information-RL-AdditionRqstTDD ::= SEQUENCE {
  rL-ID RL-ID,
  c-ID C-ID,
  frameOffset FrameOffset,
  diversityControlField DiversityControlField,
  initial-DL-Transmission-Power DL-Power OPTIONAL,
  maximumDL-Power DL-Power OPTIONAL,
  minimumDL-Power DL-Power OPTIONAL,
  dL-TimeSlotISCPInfo DL-TimeslotISCPInfo OPTIONAL, -- Applicable to Fxx 3.84Mcps TDD only
  iE-Extensions ProtocolExtensionContainer { { RL-information-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

RL-information-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD CRITICALITY notify EXTENSION TIMESLOTISCP-
InformationList-LCR-RL-AdditionRqstTDD PRESENCE optional }, -- Applicable to Fxx 1.28Mcps TDD only
  ...
}

UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-DPCHOffset TDD-DPCHOffset,
  uL-TimeslotLCR-Information UL-TimeslotLCR-Information,
  iE-Extensions ProtocolExtensionContainer { { UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
}

```

```

}
...
}
UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    dL-TimeslotLCR-Information DL-TimeslotLCR-Information,
    iE-Extensions              ProtocolExtensionContainer { { DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
...
}
DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
TIMESLOTISCP-InformationList-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
    dL-TimeslotISCP-LCR-Info   DL-TimeslotISCPInfoLCR,
    iE-Extensions              ProtocolExtensionContainer { {TimeslotISCPInfoList-LCR-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
...
}
TimeslotISCPInfoList-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
-- *****
--
-- RADIO LINK ADDITION RESPONSE FDD
--
-- *****

RadioLinkAdditionResponseFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container   {{RadioLinkAdditionResponseFDD-IEs}},
    protocolExtensions    ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-Extensions}} OPTIONAL,
...
}

RadioLinkAdditionResponseFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID          CRITICALITY    ignore          TYPE    CRNC-
CommunicationContextID          PRESENCE    mandatory    }|
    { ID    id-RL-InformationResponseList-RL-AdditionRspFDD    CRITICALITY    ignore          TYPE    RL-
InformationResponseList-RL-AdditionRspFDD    PRESENCE    mandatory    }|
    { ID    id-CriticalityDiagnostics                CRITICALITY    ignore          TYPE    CriticalityDiagnostics
      PRESENCE    optional    },
...
}

RadioLinkAdditionResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
RL-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-
RL-AdditionRspFDD }}

RL-InformationResponseItemIE-RL-AdditionRspFDD NBAP-PROTOCOL-IES ::= {
  { ID      id-RL-InformationResponseItem-RL-AdditionRspFDD      CRITICALITY      ignore      TYPE      RL-InformationResponseItem-
RL-AdditionRspFDD      PRESENCE      mandatory}
}

RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
  rL-ID              RL-ID,
  rL-Set-ID          RL-Set-ID,
  received-total-wide-band-power      Received-total-wide-band-power-Value,
  diversityIndication      DiversityIndication-RL-AdditionRspFDD,
  This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
the tabular message format in subclause 9.1.
  sSDT-SupportIndicator      SSdT-SupportIndicator,
  iE-Extensions              ProtocolExtensionContainer { { RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} }
  OPTIONAL,
  ...
}

RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DiversityIndication-RL-AdditionRspFDD ::= CHOICE {
  combining      Combining-RL-AdditionRspFDD,
  non-combining      Non-Combining-RL-AdditionRspFDD
}

Combining-RL-AdditionRspFDD ::= SEQUENCE {
  rL-ID              RL-ID,
  iE-Extensions              ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs} }      OPTIONAL,
  ...
}

CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Non-Combining-RL-AdditionRspFDD ::= SEQUENCE {
  dCH-InformationResponse      DCH-InformationResponse,
  iE-Extensions              ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspFDD-ExtIEs} }      OPTIONAL,
  ...
}

Non-CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

-- *****
--
-- RADIO LINK ADDITION RESPONSE TDD
--
-- *****

RadioLinkAdditionResponseTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkAdditionResponseTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkAdditionResponseTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkAdditionResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE          CRNC-CommunicationContextID
      PRESENCE mandatory }|
    { ID      id-RL-InformationResponse-RL-AdditionRspTDD          CRITICALITY ignore          TYPE          RL-InformationResponse-RL-
AdditionRspTDD          PRESENCE optional }| -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
    { ID      id-CriticalityDiagnostics                CRITICALITY ignore          TYPE          CriticalityDiagnostics
      PRESENCE optional },
    ...
}

RadioLinkAdditionResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-InformationResponse-LCR-RL-AdditionRspTDD          CRITICALITY ignore          EXTENSION          RL-InformationResponse-LCR-RL-
AdditionRspTDD          PRESENCE optional }, --_Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
    ...
}

RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    uL-TimeSlot-ISCP-Info    UL-TimeSlot-ISCP-Info,
    ul-PhysCH-SF-Variation    UL-PhysCH-SF-Variation,
    dCH-Information        DCH-Information-RL-AdditionRspTDD          OPTIONAL,
    dSCH-InformationResponseList    DSCH-InformationResponseList-RL-AdditionRspTDD          OPTIONAL,
    uSCH-InformationResponseList    USCH-InformationResponseList-RL-AdditionRspTDD          OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} }    OPTIONAL,
    ...
}

RL-InformationResponse-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
    diversityIndication    DiversityIndication-RL-AdditionRspTDD,
    This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in the tabular message format in subclause 9.1.
    iE-Extensions        ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs} }    OPTIONAL,
    ...
}

DCH-Information-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

}

DiversityIndication-RL-AdditionRspTDD ::= CHOICE {
    combining                Combining-RL-AdditionRspTDD,
    non-Combining            Non-Combining-RL-AdditionRspTDD
}

Combining-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                    RL-ID,
    iE-Extensions            ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs } }    OPTIONAL,
    ...
}

CombiningItem-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Non-Combining-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-InformationResponse  DCH-InformationResponse,
    iE-Extensions            ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspTDD-ExtIEs } }    OPTIONAL,
    ...
}

Non-CombiningItem-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-AdditionRspTDD }}

DSCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationResponse  CRITICALITY ignore  TYPE DSCH-InformationResponse  PRESENCE mandatory }
}

USCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-AdditionRspTDD }}

USCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
    { ID id-USCH-InformationResponse  CRITICALITY ignore  TYPE USCH-InformationResponse  PRESENCE mandatory }
}

RL-InformationResponse-LCR-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                    RL-ID,
    uL-TimeSlot-ISCP-InfoLCR  UL-TimeSlot-ISCP-Info,
    uL-PhysCH-SF-Variation    UL-PhysCH-SF-Variation,
    dCH-Information           DCH-Information-RL-AdditionRspTDD    OPTIONAL,
    dSCH-InformationResponseList  DSCH-InformationResponseList-RL-AdditionRspTDD    OPTIONAL,
    uSCH-InformationResponseList  USCH-InformationResponseList-RL-AdditionRspTDD    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIEs } }    OPTIONAL,
    ...
}

RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- RADIO LINK ADDITION FAILURE FDD
--
-- *****

RadioLinkAdditionFailureFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkAdditionFailureFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkAdditionFailureFDD-Extensions}}      OPTIONAL,
    ...
}

RadioLinkAdditionFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID    CRITICALITY    ignore    TYPE    CRNC-CommunicationContextID    PRESENCE mandatory }|
    { ID    id-CauseLevel-RL-AdditionFailureFDD    CRITICALITY    ignore    TYPE    CauseLevel-RL-AdditionFailureFDD    PRESENCE mandatory }|
    { ID    id-CriticalityDiagnostics          CRITICALITY    ignore    TYPE    CriticalityDiagnostics          PRESENCE optional
    },
    ...
}

RadioLinkAdditionFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CauseLevel-RL-AdditionFailureFDD ::= CHOICE {
    generalCause          GeneralCauseList-RL-AdditionFailureFDD,
    rLSpecificCause       RLSpecificCauseList-RL-AdditionFailureFDD,
    ...
}

GeneralCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    cause                  Cause,
    iE-Extensions          ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs } }      OPTIONAL,
    ...
}

GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD    Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD,
    successful-RL-InformationRespList-RL-AdditionFailureFDD      Successful-RL-InformationRespList-RL-AdditionFailureFDD OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs } }      OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureFDD }}
```

```
Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD PRESENCE mandatory}
}
```

```
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID RL-ID,
  cause Cause,
  iE-Extensions ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs } }
  OPTIONAL,
  ...
}
```

```
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
Successful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-2)) OF ProtocolIE-Single-Container {{ Successful-RL-InformationRespItemIE-RL-AdditionFailureFDD }}
```

```
Successful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Successful-RL-InformationRespItem-RL-AdditionFailureFDD PRESENCE mandatory}
}
```

```
Successful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID RL-ID,
  rL-Set-ID RL-Set-ID,
  received-total-wide-band-power Received-total-wide-band-power-Value,
  diversityIndication DiversityIndication-RL-AdditionFailureFDD,
  This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in the tabular message format in subclause 9.1.
  sSDT-SupportIndicator SSDT-SupportIndicator,
  iE-Extensions ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs } }
  OPTIONAL,
  ...
}
```

```
Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
DiversityIndication-RL-AdditionFailureFDD ::= CHOICE {
  combining Combining-RL-AdditionFailureFDD,
  non-Combining Non-Combining-RL-AdditionFailureFDD
}
```

```
Combining-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID RL-ID,
  iE-Extensions ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-ExtIEs } }
  OPTIONAL,
```

```

}
...
}
CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
Non-Combining-RL-AdditionFailureFDD ::= SEQUENCE {
    dCH-InformationResponse          DCH-InformationResponse,
    iE-Extensions                    ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs} }    OPTIONAL,
...
}
Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- RADIO LINK ADDITION FAILURE TDD
--
-- *****

RadioLinkAdditionFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkAdditionFailureTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkAdditionFailureTDD-Extensions}}    OPTIONAL,
...
}

RadioLinkAdditionFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore TYPE CRNC-CommunicationContextID
    PRESENCE mandatory }|
    { ID id-CauseLevel-RL-AdditionFailureTDD      CRITICALITY ignore TYPE CauseLevel-RL-AdditionFailureTDD
    PRESENCE mandatory }|
    { ID id-CriticalityDiagnostics                CRITICALITY ignore TYPE CriticalityDiagnostics
    PRESENCE optional },
...
}

RadioLinkAdditionFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

CauseLevel-RL-AdditionFailureTDD ::= CHOICE {
    generalCause          GeneralCauseList-RL-AdditionFailureTDD,
    rLSpecificCause       RLSpecificCauseList-RL-AdditionFailureTDD,
...
}

GeneralCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    cause                  Cause,
    iE-Extensions          ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs} }    OPTIONAL,
...
}

```

```

}

GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD    Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD,
    iE-Extensions                                                ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs } }
    OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD} }

Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD    CRITICALITY ignore    TYPE Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD
    PRESENCE mandatory }
}

Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD ::= SEQUENCE {
    rL-ID                    RL-ID,
    cause                    Cause,
    iE-Extensions           ProtocolExtensionContainer { { Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD-ExtIEs } }
    OPTIONAL,
    ...
}

Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE FDD
--
-- *****

RadioLinkReconfigurationPrepareFDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkReconfigurationPrepareFDD-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareFDD-Extensions}}
    OPTIONAL,
    ...
}

RadioLinkReconfigurationPrepareFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID    CRITICALITY reject    TYPE NodeB-CommunicationContextID
    PRESENCE mandatory } |

```

```

{ ID id-UL-DPCH-Information-RL-ReconfPrepFDD CRITICALITY reject TYPE UL-DPCH-Information-RL-
ReconfPrepFDD PRESENCE optional } |
{ ID id-DL-DPCH-Information-RL-ReconfPrepFDD CRITICALITY reject TYPE DL-DPCH-Information-RL-
ReconfPrepFDD PRESENCE optional } |
{ ID id-FDD-DCHs-to-Modify CRITICALITY reject TYPE FDD-DCHs-to-Modify PRESENCE optional } |
{ ID id-DCHs-to-Add-FDD CRITICALITY reject TYPE DCH-FDD-Information PRESENCE optional } |
{ ID id-DCH-DeleteList-RL-ReconfPrepFDD CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepFDD
PRESENCE optional } |
{ ID id-DSCH-ModifyList-RL-ReconfPrepFDD CRITICALITY reject TYPE DSCH-ModifyList-RL-ReconfPrepFDD
PRESENCE optional } |
{ ID id-DSCHs-to-Add-FDD CRITICALITY reject TYPE DSCH-FDD-Information PRESENCE optional } |
{ ID id-DSCH-DeleteList-RL-ReconfPrepFDD CRITICALITY reject TYPE DSCH-DeleteList-RL-ReconfPrepFDD
PRESENCE optional } |
{ ID id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD CRITICALITY reject TYPE TFCI2-BearerSpecificInformation-
RL-ReconfPrepFDD PRESENCE optional } |
{ ID id-RL-InformationList-RL-ReconfPrepFDD CRITICALITY reject TYPE RL-InformationList-RL-
ReconfPrepFDD PRESENCE optional } |
{ ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information
PRESENCE optional },
...
}

RadioLinkReconfigurationPrepareFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DSCH-FDD-Common-Information CRITICALITY ignore EXTENSION DSCH-FDD-Common-Information PRESENCE optional
  },
  ...
}

UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
  ul-ScramblingCode UL-ScramblingCode OPTIONAL,
  ul-SIR-Target UL-SIR OPTIONAL,
  minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength OPTIONAL,
  maxNrOfUL-DPDCHs MaxNrOfUL-DPDCHs OPTIONAL,
  -- This IE shall be present if minUL-ChannelisationCodeLength Ie is set to 4
  ul-PunctureLimit PunctureLimit OPTIONAL,
  tFCS TFCS OPTIONAL,
  ul-DPCCH-SlotFormat UL-DPCCH-SlotFormat OPTIONAL,
  diversityMode DiversityMode OPTIONAL,
  sSDT-CellIDLength SSDT-CellID-Length OPTIONAL,
  s-FieldLength S-FieldLength OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
  ...
}

UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
  tFCS TFCS OPTIONAL,
  dl-DPCH-SlotFormat DL-DPCH-SlotFormat OPTIONAL,
  tFCI-SignallingMode TFCI-SignallingMode OPTIONAL,

```

```

tFCI-Presence          TFCI-Presence          OPTIONAL,
-- This IE shall be present if the DL DPCH Slot Format IE is set to any of the values from 12 to 16
multiplexingPosition    MultiplexingPosition    OPTIONAL,
pDSCH-CodeMapping       PDSCH-CodeMapping      OPTIONAL,
pDSCH-RL-ID             RL-ID                  OPTIONAL,
limitedPowerIncrease     LimitedPowerIncrease    OPTIONAL,
iE-Extensions           ProtocolExtensionContainer { { DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
...
}

DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}

DCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepFDD

DCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
dCH-ID                DCH-ID,
iE-Extensions         ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
...
}

DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}

DSCH-ModifyList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-ModifyItemIE-RL-ReconfPrepFDD }}

DSCH-ModifyItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
{ ID      id-DSCH-ModifyItem-RL-ReconfPrepFDD      CRITICALITY reject          TYPE      DSCH-ModifyItem-RL-ReconfPrepFDD      PRESENCE mandatory}
}

DSCH-ModifyItem-RL-ReconfPrepFDD ::= SEQUENCE {
dSCH-ID                DSCH-ID,
dl-TransportFormatSet  TransportFormatSet      OPTIONAL,
allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
frameHandlingPriority   FrameHandlingPriority    OPTIONAL,
toAWS                  ToAWS                   OPTIONAL,
toAWE                  ToAWE                   OPTIONAL,
transportBearerRequestIndicator TransportBearerRequestIndicator,
iE-Extensions         ProtocolExtensionContainer { { DSCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
...
}

DSCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}

DSCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-DeleteItemIE-RL-ReconfPrepFDD }}

DSCH-DeleteItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
{ ID      id-DSCH-DeleteItem-RL-ReconfPrepFDD      CRITICALITY reject          TYPE      DSCH-DeleteItem-RL-ReconfPrepFDD      PRESENCE mandatory}
}

```

```

DSCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs } }    OPTIONAL,
    ...
}

DSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD ::= CHOICE {
    addOrModify          AddOrModify-TFCI2-RL-ReconfPrepFDD,
    delete              NULL
}

AddOrModify-TFCI2-RL-ReconfPrepFDD ::= SEQUENCE {
    toAWS                ToAWS,
    toAWE                ToAWE,
    iE-Extensions       ProtocolExtensionContainer { { AddOrModify-TFCI2-RL-ReconfPrepFDD-ExtIEs } }    OPTIONAL,
    ...
}

AddOrModify-TFCI2-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfPrepFDD }}

RL-InformationItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-ReconfPrepFDD          CRITICALITY    reject          TYPE          RL-InformationItem-RL-
ReconfPrepFDD          PRESENCE    mandatory}
}

RL-InformationItem-RL-ReconfPrepFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    dl-CodeInformation   FDD-DL-CodeInformation    OPTIONAL,
    maxDL-Power          DL-Power                OPTIONAL,
    minDL-Power          DL-Power                OPTIONAL,
    sSDT-Indication      SSDT-Indication          OPTIONAL,
    sSDT-Cell-Identity   SSDT-Cell-Identity          OPTIONAL,
    -- The IE shall be present if the SSDT Indication IE is set to "SSDT Active in the UE"
    transmitDiversityIndicator  TransmitDiversityIndicator    OPTIONAL,
    -- This IE shall be present if Diversity Mode IE is present in UL DPCH Information IE and it is not set to "none"
    iE-Extensions       ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfPrepFDD-ExtIEs } }    OPTIONAL,
    ...
}

RL-InformationItem-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SSDT-CellIDforEDSCHPC CRITICALITY ignore EXTENSION SSDT-Cell-Identity          PRESENCE conditional },
    -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Common Information IE.
    ...
}

```



```
-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE TDD
--
-- *****
```

```
RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationPrepareTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}}    OPTIONAL,
    ...
}
```

```
RadioLinkReconfigurationPrepareTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-NodeB-CommunicationContextID          CRITICALITY    reject    TYPE          NodeB-CommunicationContextID
      PRESENCE    mandatory    } |
    { ID      id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD    CRITICALITY    reject    TYPE    UL-CCTrCH-
    InformationAddList-RL-ReconfPrepTDD    PRESENCE    optional    } |
    { ID      id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD    CRITICALITY    reject    TYPE    UL-CCTrCH-
    InformationModifyList-RL-ReconfPrepTDD    PRESENCE    optional    } |
    { ID      id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD    CRITICALITY    reject    TYPE    UL-CCTrCH-
    InformationDeleteList-RL-ReconfPrepTDD    PRESENCE    optional    } |
    { ID      id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD    CRITICALITY    reject    TYPE    DL-CCTrCH-
    InformationAddList-RL-ReconfPrepTDD    PRESENCE    optional    } |
    { ID      id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD    CRITICALITY    reject    TYPE    DL-CCTrCH-
    InformationModifyList-RL-ReconfPrepTDD    PRESENCE    optional    } |
    { ID      id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD    CRITICALITY    reject    TYPE    DL-CCTrCH-
    InformationDeleteList-RL-ReconfPrepTDD    PRESENCE    optional    } |
    { ID      id-TDD-DCHs-to-Modify          CRITICALITY    reject    TYPE    TDD-DCHs-to-Modify          PRESENCE    optional
    } |
    { ID      id-DCHs-to-Add-TDD          CRITICALITY    reject    TYPE    DCH-TDD-Information          PRESENCE    optional
    } |
    { ID      id-DCH-DeleteList-RL-ReconfPrepTDD    CRITICALITY    reject    TYPE          DCH-DeleteList-RL-ReconfPrepTDD
      PRESENCE    optional    } |
    { ID      id-DSCH-Information-ModifyList-RL-ReconfPrepTDD    CRITICALITY    reject    TYPE          DSCH-Information-ModifyList-RL-
    ReconfPrepTDD    PRESENCE    optional    } |
    { ID      id-DSCHs-to-Add-TDD          CRITICALITY    reject    TYPE    DSCH-TDD-Information          PRESENCE    optional    } |
    { ID      id-DSCH-Information-DeleteList-RL-ReconfPrepTDD    CRITICALITY    reject    TYPE          DSCH-Information-DeleteList-RL-
    ReconfPrepTDD    PRESENCE    optional    } |
    { ID      id-USCH-Information-ModifyList-RL-ReconfPrepTDD    CRITICALITY    reject    TYPE          USCH-Information-ModifyList-RL-
    ReconfPrepTDD    PRESENCE    optional    } |
    { ID      id-USCH-Information-Add          CRITICALITY    reject    TYPE    USCH-Information          PRESENCE    optional    } |
    { ID      id-USCH-Information-DeleteList-RL-ReconfPrepTDD    CRITICALITY    reject    TYPE          USCH-Information-DeleteList-RL-
    ReconfPrepTDD    PRESENCE    optional    } |
    { ID      id-RL-Information-RL-ReconfPrepTDD    CRITICALITY    reject    TYPE          RL-Information-RL-ReconfPrepTDD
      PRESENCE    optional    },
    ...
}
```

```
RadioLinkReconfigurationPrepareTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```

UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    tFCS                      TFCs,
    tFCI-Coding               TFCI-Coding,
    punctureLimit             PunctureLimit,
    ul-DPCH-InformationList   UL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-DPCH-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional } | -- Applicable to Fes 3.84Mcps TDD only
    { ID id-UL-SIRTarget CRITICALITY reject EXTENSION UL-SIR PRESENCE optional },
    -- This IE shall be mandatory for 1.28Mcps TDD, Not applicable for 3.84Mcps TDD.
    ...
}

UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationAddItem-RL-ReconfPrepTDD PRESENCE
    mandatory }
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset           TDD-DPCHOffset,
    ul-Timeslot-Information   UL-Timeslot-Information,
    iE-Extensions             ProtocolExtensionContainer { { UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD } }

UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
    PRESENCE mandatory } -- Applicable to Fes 1.28Mcps TDD only
}

UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset           TDD-DPCHOffset,
    ul-Timeslot-InformationLCR UL-TimeslotLCR-Information,
    iE-Extensions             ProtocolExtensionContainer { { UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
}

```

```

}
...
}
UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD
UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
cCTrCH-ID CCTrCH-ID,
tFCS TFCS OPTIONAL,
tFCI-Coding TFCI-Coding OPTIONAL,
punctureLimit PunctureLimit OPTIONAL,
ul-DPCH-InformationAddList UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD OPTIONAL,
ul-DPCH-InformationModifyList UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
ul-DPCH-InformationDeleteList UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD OPTIONAL,
iE-Extensions ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
OPTIONAL,
...
}
UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-UL-DPCH-LCR-InformationModify-AddList CRITICALITY reject EXTENSION UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
PRESENCE optional } | -- Applicable to Fo 1.28Mcps TDD only
{ ID id-UL-SIRTarget CRITICALITY reject EXTENSION UL-SIR PRESENCE optional },
-- This IE shall be aApplicable to Fo 1.28Mcps TDD only.
...
}
UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}
UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
{ ID id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
PRESENCE mandatory }
}
UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
repetitionPeriod RepetitionPeriod,
repetitionLength RepetitionLength,
tdd-DPCHOffset TDD-DPCHOffset,
uL-Timeslot-Information UL-Timeslot-Information,
iE-Extensions ProtocolExtensionContainer { { UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
OPTIONAL,
...
}
UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationModify-AddListIEs-RL-
ReconfPrepTDD }}

```

```

UL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE UL-DPCH-LCR-InformationModify-AddItem-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  uL-Timeslot-InformationLCR  UL-TimeslotLCR-Information,
  iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE UL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod  OPTIONAL,
  repetitionLength          RepetitionLength  OPTIONAL,
  tdd-DPCHOffset            TDD-DPCHOffset    OPTIONAL,
  uL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD  UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD  CRITICALITY reject  EXTENSION  UL-TimeslotLCR-InformationModify-ModifyList-RL-
ReconfPrepTDD  PRESENCE optional }, -- Applicable to Foe 1.28Mcps TDD only
  ...
}

UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD  -- Applicable to Foe 3.84Mcps TDD only

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  timeSlot                  TimeSlot,
  midambleShiftAndBurstType  MidambleShiftAndBurstType  OPTIONAL,
  tFCI-Presence              TFCI-Presence  OPTIONAL,
  uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD  UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
}

```

```

}
...
}
UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCode TDD-ChannelisationCode OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
UL-TimeslotLCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfPrepTDD -- Applicable to FSS 1.28Mcps TDD only
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR OPTIONAL,
    tFCI-Presence              TFCI-Presence OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLRCR           UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLRCR OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLRCR ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR-ExtIEs} }
    OPTIONAL,
    ...
}
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD } }

```

```

UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE UL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

```

```

UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

```

```

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dPCH-ID                DPCH-ID,
  iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

```

```

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

```

```

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID              CCTrCH-ID,
  iE-Extensions          ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

```

```

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

```

```

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID              CCTrCH-ID,
  tFCS                   TFCS,
  tFCI-Coding            TFCI-Coding,
  punctureLimit          PunctureLimit,
  cCTrCH-TPCList         CCTrCH-TPCAddList-RL-ReconfPrepTDD          OPTIONAL,
  dl-DPCH-InformationList DL-DPCH-InformationAddList-RL-ReconfPrepTDD  OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { { DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

```

```

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD  CRITICALITY reject          EXTENSION          DL-DPCH-LCR-
InformationAddList-RL-ReconfPrepTDD          PRESENCE optional }, -- Applicable to Fes 1.28Mcps TDD only
  ...
}

```

```

CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD
TDD only -- Applicable to FSS 3.84Mcps

CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID          CCTrCH-ID,
    iE-Extensions      ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationAddItem-RL-ReconfPrepTDD PRESENCE
mandatory }
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dL-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD }}

DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
PRESENCE mandatory } -- Applicable to FSS 1.28Mcps TDD only
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dL-Timeslot-InformationLCR DL-TimeslotLCR-Information,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    tFCS                     TFCS                                OPTIONAL,
    tFCI-Coding              TFCI-Coding                        OPTIONAL,
    punctureLimit           PunctureLimit                    OPTIONAL,
    cCTrCH-TPCList          CCTrCH-TPCModifyList-RL-ReconfPrepTDD  OPTIONAL,
    dl-DPCH-InformationAddList DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD  OPTIONAL,
    dl-DPCH-InformationModifyList DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
    dl-DPCH-InformationDeleteList DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD  OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
    { ID id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject          EXTENSION          DL-DPCH-LCR-InformationModify-
AddList-RL-ReconfPrepTDD          PRESENCE optional }
}

CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs } }          OPTIONAL,
    ...
}

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }} --
Applicable to For 3.84Mcps TDD only

DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject          TYPE DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
PRESENCE mandatory } For 1.28Mcps TDD only
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod        RepetitionPeriod,
    repetitionLength        RepetitionLength,
    tdd-DPCHOffset          TDD-DPCHOffset,
    dl-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }          OPTIONAL,
    ...
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

}

DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-LCR-InformationModify-AddListIEs-RL-
ReconfPrepTDD }}

DL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-LCR-InformationModify-AddItem-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength         RepetitionLength,
  tdd-DPCHOffset           TDD-DPCHOffset,
  dL-Timeslot-InformationLCR DL-TimeslotLCR-Information,
  iE-Extensions            ProtocolExtensionContainer { { DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod          OPTIONAL,
  repetitionLength         RepetitionLength          OPTIONAL,
  tdd-DPCHOffset           TDD-DPCHOffset            OPTIONAL,
  dL-Timeslot-InformationAddModify-ModifyList-RL-ReconfPrepTDD DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD  CRITICALITY reject          EXTENSION          DL-Timeslot-
LCR-InformationModify-ModifyList-RL-ReconfPrepTDD          PRESENCE optional },
  ...
}

DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  timeSlot                 TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType          OPTIONAL,

```

```

tFCI-Presence                tFCI-Presence                OPTIONAL,
dL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD                DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD                OPTIONAL,
iE-Extensions                ProtocolExtensionContainer { { DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
...
}

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
dPCH-ID                DPCH-ID,
tdd-ChannelisationCode                TDD-ChannelisationCode                OPTIONAL,
iE-Extensions                ProtocolExtensionContainer { { DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
...
}

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
timeSlotLCR                TimeSlotLCR,
midambleShiftLCR                MidambleShiftLCR                OPTIONAL,
tFCI-Presence                tFCI-Presence                OPTIONAL,
dL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD                DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD                OPTIONAL,
iE-Extensions                ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
...
}

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
dPCH-ID                DPCH-ID,
tdd-ChannelisationCodeLCR                TDD-ChannelisationCodeLCR                OPTIONAL,
iE-Extensions                ProtocolExtensionContainer { { DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
...
}

DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

}

DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD   CRITICALITY reject           TYPE DL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD           PRESENCE mandatory }
}

DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dPCH-ID                DPCH-ID,
  iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCCTrCH-ID            CCTrCH-ID,
  iE-Extensions          ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD

DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dCH-ID                DCH-ID,
  iE-Extensions          ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }      OPTIONAL,
  ...
}

DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DSCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-ModifyItem-RL-ReconfPrepTDD

DSCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dSCH-ID                DSCH-ID,
  cCCTrCH-ID            CCTrCH-ID                OPTIONAL,
}

```

```

transportFormatSet          TransportFormatSet          OPTIONAL,
allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
frameHandlingPriority       FrameHandlingPriority    OPTIONAL,
toAWS                       ToAWS                OPTIONAL,
toAWE                       ToAWE                OPTIONAL,
transportBearerRequestIndicator TransportBearerRequestIndicator,
iE-Extensions              ProtocolExtensionContainer { { DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
...
}

DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}

DSCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-DeleteItem-RL-ReconfPrepTDD

DSCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
dSCH-ID                DSCH-ID,
iE-Extensions          ProtocolExtensionContainer { { DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
...
}

DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}

USCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-ModifyItem-RL-ReconfPrepTDD

USCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
uSCH-ID                USCH-ID,
transportFormatSet     TransportFormatSet          OPTIONAL,
allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
cCTrCH-ID              CCTrCH-ID                OPTIONAL,
transportBearerRequestIndicator TransportBearerRequestIndicator,
iE-Extensions          ProtocolExtensionContainer { { USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
...
}

USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}

USCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-DeleteItem-RL-ReconfPrepTDD

USCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
uSCH-ID                USCH-ID,
iE-Extensions          ProtocolExtensionContainer { { USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
...
}

USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

}

RL-Information-RL-ReconfPrepTDD ::= SEQUENCE {
    rL-ID                               RL-ID,
    maxDL-Power                         DL-Power           OPTIONAL,
    minDL-Power                         DL-Power           OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { RL-Information-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

RL-Information-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-InitDL-Power                CRITICALITY ignore      EXTENSION DL-Power          PRESENCE optional          },
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION READY
--
-- *****

RadioLinkReconfigurationReady ::= SEQUENCE {
    protocolIEs                        ProtocolIE-Container  {{RadioLinkReconfigurationReady-IEs}},
    protocolExtensions                 ProtocolExtensionContainer {{RadioLinkReconfigurationReady-Extensions}} OPTIONAL,
    ...
}

RadioLinkReconfigurationReady-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID CRITICALITY ignore      TYPE CRNC-CommunicationContextID
      PRESENCE mandatory } |
    { ID id-RL-InformationResponseList-RL-ReconfReady CRITICALITY ignore      TYPE RL-InformationResponseList-RL-
    ReconfReady PRESENCE optional } |
    { ID id-CriticalityDiagnostics        CRITICALITY ignore      TYPE CriticalityDiagnostics
      PRESENCE optional },
    ...
}

RadioLinkReconfigurationReady-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationResponseList-RL-ReconfReady ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-RL-
ReconfReady}}

RL-InformationResponseItemIE-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfReady CRITICALITY ignore      TYPE RL-InformationResponseItem-
    RL-ReconfReady PRESENCE mandatory }
}

RL-InformationResponseItem-RL-ReconfReady ::= SEQUENCE {
    rL-ID                               RL-ID,
    dCH-InformationResponseList-RL-ReconfReady DCH-InformationResponseList-RL-ReconfReady OPTIONAL,
    dSCH-InformationResponseList-RL-ReconfReady DSCH-InformationResponseList-RL-ReconfReady OPTIONAL,
}

```

```

uSCH-InformationResponseList-RL-ReconfReady USCH-InformationResponseList-RL-ReconfReady OPTIONAL, -- TDD only
tFCI2-BearerInformationResponse            OPTIONAL, --FDD only
iE-Extensions                             ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfReady-ExtIEs } } OPTIONAL,
...
}

RL-InformationResponseItem-RL-ReconfReady-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfReady }}

DCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
{ ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE mandatory }
}

DSCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-ReconfReady }}

DSCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
{ ID id-DSCH-InformationResponse CRITICALITY ignore TYPE DSCH-InformationResponse PRESENCE mandatory }
}

USCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-ReconfReady }}

USCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
{ ID id-USCH-InformationResponse CRITICALITY ignore TYPE USCH-InformationResponse PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK RECONFIGURATION FAILURE
--
-- *****

RadioLinkReconfigurationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{RadioLinkReconfigurationFailure-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationFailure-Extensions}} OPTIONAL,
    ...
}

RadioLinkReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
{ ID id-CRNC-CommunicationContextID CRITICALITY ignore TYPE CRNC-CommunicationContextID PRESENCE mandatory } |
{ ID id-CauseLevel-RL-ReconfFailure CRITICALITY ignore TYPE CauseLevel-RL-ReconfFailure PRESENCE mandatory } |
{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
...
}

RadioLinkReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

CauseLevel-RL-ReconfFailure ::= CHOICE {
    generalCause      GeneralCauseList-RL-ReconfFailure,
    rLSpecificCause   RLSpecificCauseList-RL-ReconfFailure,
    ...
}

GeneralCauseList-RL-ReconfFailure ::= SEQUENCE {
    cause              Cause,
    iE-Extensions     ProtocolExtensionContainer { { GeneralCauseItem-RL-ReconfFailure-ExtIEs} } OPTIONAL,
    ...
}

GeneralCauseItem-RL-ReconfFailure-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-ReconfFailure ::= SEQUENCE {
    rL-ReconfigurationFailureList-RL-ReconfFailure  RL-ReconfigurationFailureList-RL-ReconfFailure OPTIONAL,
    iE-Extensions     ProtocolExtensionContainer { { RLSpecificCauseItem-RL-ReconfFailure-ExtIEs} } OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-ReconfFailure-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-ReconfigurationFailureList-RL-ReconfFailure ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-
ReconfigurationFailureItemIE-RL-ReconfFailure}}

RL-ReconfigurationFailureItemIE-RL-ReconfFailure  NBAP-PROTOCOL-IES ::= {
    { ID      id-RL-ReconfigurationFailureItem-RL-ReconfFailure      CRITICALITY      ignore      TYPE RL-
ReconfigurationFailureItem-RL-ReconfFailure      PRESENCE      mandatory}
}

RL-ReconfigurationFailureItem-RL-ReconfFailure ::= SEQUENCE {
    rL-ID      RL-ID,
    cause      Cause,
    iE-Extensions     ProtocolExtensionContainer { { RL-ReconfigurationFailureItem-RL-ReconfFailure-ExtIEs} }
    OPTIONAL,
    ...
}

RL-ReconfigurationFailureItem-RL-ReconfFailure-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION COMMIT
--
-- *****

RadioLinkReconfigurationCommit ::= SEQUENCE {

```

```

    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationCommit-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationCommit-Extensions}}
    ...
}

RadioLinkReconfigurationCommit-IEs NBAP-PROTOCOL-IES ::= {
  { ID    id-NodeB-CommunicationContextID    CRITICALITY    ignore    TYPE    NodeB-CommunicationContextID    PRESENCE mandatory } |
  { ID    id-CFN                             CRITICALITY    ignore    TYPE    CFN                             PRESENCE mandatory } |
  { ID    id-Active-Pattern-Sequence-Information CRITICALITY    ignore    TYPE    Active-Pattern-Sequence-Information PRESENCE optional }
  ...
}

RadioLinkReconfigurationCommit-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION CANCEL
--
-- *****

RadioLinkReconfigurationCancel ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationCancel-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationCancel-Extensions}}
  ...
}

RadioLinkReconfigurationCancel-IEs NBAP-PROTOCOL-IES ::= {
  { ID    id-NodeB-CommunicationContextID    CRITICALITY    ignore    TYPE    NodeB-CommunicationContextID    PRESENCE mandatory }
  ...
}

RadioLinkReconfigurationCancel-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST FDD
--
-- *****

RadioLinkReconfigurationRequestFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationRequestFDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationRequestFDD-Extensions}}
  ...
}

RadioLinkReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID    id-NodeB-CommunicationContextID    CRITICALITY    reject    TYPE    NodeB-CommunicationContextID    PRESENCE mandatory } |
  { ID    id-NodeB-CommunicationContextID    CRITICALITY    reject    TYPE    NodeB-CommunicationContextID    PRESENCE optional }
  ...
}

```


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```

{ ID id-UL-DPCH-Information-RL-ReconfRqstFDD CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfRqstFDD PRESENCE
optional } |
{ ID id-DL-DPCH-Information-RL-ReconfRqstFDD CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfRqstFDD PRESENCE
optional } |
{ ID id-FDD-DCHs-to-Modify CRITICALITY reject TYPE FDD-DCHs-to-Modify PRESENCE optional } |
{ ID id-DCHs-to-Add-FDD CRITICALITY reject TYPE DCH-FDD-Information PRESENCE optional } |
{ ID id-DCH-DeleteList-RL-ReconfRqstFDD CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstFDD PRESENCE
optional } |
{ ID id-RL-InformationList-RL-ReconfRqstFDD CRITICALITY reject TYPE RL-InformationList-RL-ReconfRqstFDD PRESENCE
optional } |
{ ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information
PRESENCE optional },
...
}

```

```

RadioLinkReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
ul-TFCS TFCS OPTIONAL,
iE-Extensions ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs } } OPTIONAL,
...
}

```

```

UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
dl-TFCS TFCS OPTIONAL,
tFCI-SignallingMode TFCI-SignallingMode OPTIONAL,
limitedPowerIncrease LimitedPowerIncrease OPTIONAL,
iE-Extensions ProtocolExtensionContainer { { DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs } } OPTIONAL,
...
}

```

```

DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

DCH-DeleteList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstFDD

```

```

DCH-DeleteItem-RL-ReconfRqstFDD ::= SEQUENCE {
dCH-ID DCH-ID,
iE-Extensions ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs } } OPTIONAL,
...
}

```

```

DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

}

RL-InformationList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfRqstFDD}}

RL-InformationItemIE-RL-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID      id-RL-InformationItem-RL-ReconfRqstFDD      CRITICALITY    reject          TYPE          RL-InformationItem-RL-
ReconfRqstFDD      PRESENCE      mandatory}
}

RL-InformationItem-RL-ReconfRqstFDD ::= SEQUENCE {
  rL-ID                RL-ID,
  maxDL-Power          DL-Power          OPTIONAL,
  minDL-Power          DL-Power          OPTIONAL,
  dl-CodeInformation   FDD-DL-CodeInformation OPTIONAL,
  -- The IE shall be present if the Transmission Gap Pattern Sequence Information IE is included and the indicated Downlink Compressed Mode method for
at least one of the included Transmission Gap Pattern Sequence is set to "SF/2".
  iE-Extensions       ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstFDD-ExtIEs} }      OPTIONAL,
  ...
}

RL-InformationItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- *****

RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container   {{RadioLinkReconfigurationRequestTDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}}      OPTIONAL,
  ...
}

RadioLinkReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-NodeB-CommunicationContextID      CRITICALITY    reject          TYPE NodeB-
CommunicationContextID      PRESENCE      mandatory } |
  { ID      id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD      CRITICALITY    notify          TYPE UL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD      PRESENCE      optional } |
  { ID      id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD      CRITICALITY    notify          TYPE UL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD      PRESENCE      optional } |
  { ID      id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD      CRITICALITY    notify          TYPE DL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD      PRESENCE      optional } |
  { ID      id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD      CRITICALITY    notify          TYPE DL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD      PRESENCE      optional } |
  { ID      id-TDD-DCHs-to-Modify          CRITICALITY    reject          TYPE TDD-DCHs-to-Modify          PRESENCE optional } |
  { ID      id-DCHs-to-Add-TDD          CRITICALITY    reject          TYPE DCH-TDD-Information
PRESENCE optional } |
  { ID      id-DCH-DeleteList-RL-ReconfRqstTDD      CRITICALITY    reject          TYPE DCH-DeleteList-RL-
ReconfRqstTDD      PRESENCE      optional } |
}

```

```

    { ID      id-RL-Information-RL-ReconfRqstTDD
      PRESENCE optional },
    ...
}

RadioLinkReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD      CRITICALITY    notify
      InformationModifyItem-RL-ReconfRqstTDD      PRESENCE    mandatory}
    TYPE UL-CCTrCH-
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS                TFCS          OPTIONAL,
    punctureLimit      PunctureLimit  OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD      CRITICALITY    notify
      InformationDeleteItem-RL-ReconfRqstTDD      PRESENCE    mandatory}
    TYPE UL-CCTrCH-
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    iE-Extensions      ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {

```

```

{ ID      id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD      CRITICALITY      notify      TYPE      DL-CCTrCH-
InformationModifyItem-RL-ReconfRqstTDD      PRESENCE      mandatory}
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCCTrCH-ID      CCTrCH-ID,
  tFCS      TFCS      OPTIONAL,
  punctureLimit      PunctureLimit      OPTIONAL,
  iE-Extensions      ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs      NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD      NBAP-PROTOCOL-IES ::= {
  { ID      id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD      CRITICALITY      notify      TYPE      DL-CCTrCH-
InformationDeleteItem-RL-ReconfRqstTDD      PRESENCE      mandatory}
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCCTrCH-ID      CCTrCH-ID,
  iE-Extensions      ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs      NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-DeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD

DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
  dCH-ID      DCH-ID,
  iE-Extensions      ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs } }      OPTIONAL,
  ...
}

DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs      NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Information-RL-ReconfRqstTDD ::= SEQUENCE {
  rL-ID      RL-ID,
  maxDL-Power      DL-Power      OPTIONAL,
  minDL-Power      DL-Power      OPTIONAL,
  iE-Extensions      ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstTDD-ExtIEs } }      OPTIONAL,
}

```

```

}
...
}
RL-InformationItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
-- *****
--
-- RADIO LINK RECONFIGURATION RESPONSE
--
-- *****

RadioLinkReconfigurationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationResponse-Extensions}}      OPTIONAL,
    ...
}

RadioLinkReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID          CRITICALITY ignore      TYPE      CRNC-CommunicationContextID          PRESENCE
    mandatory } |
    { ID      id-RL-InformationResponseList-RL-ReconfRsp  CRITICALITY ignore      TYPE      RL-InformationResponseList-RL-ReconfRsp          PRESENCE
    optional  } |
    { ID      id-CriticalityDiagnostics                CRITICALITY ignore      TYPE      CriticalityDiagnostics                PRESENCE
    optional  },
    ...
}

RadioLinkReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

RL-InformationResponseList-RL-ReconfRsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationResponseItemIE-RL-ReconfRsp}}

RL-InformationResponseItemIE-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
    { ID      id-RL-InformationResponseItem-RL-ReconfRsp          CRITICALITY ignore      TYPE      RL-InformationResponseItem-RL-
ReconfRsp          PRESENCE mandatory}
}

RL-InformationResponseItem-RL-ReconfRsp ::= SEQUENCE {
    rL-ID          RL-ID,
    dCH-InformationResponseList-RL-ReconfRsp          DCH-InformationResponseList-RL-ReconfRsp          OPTIONAL,
    iE-Extensions  ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfRsp-ExtIEs } }      OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-ReconfRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DCH-InformationResponseList-RL-ReconfRsp ::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfRsp }}

```

```

DCH-InformationResponseListIEs-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK DELETION REQUEST
--
-- *****

RadioLinkDeletionRequest ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkDeletionRequest-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkDeletionRequest-Extensions}} OPTIONAL,
  ...
}

RadioLinkDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID CRITICALITY reject TYPE NodeB-CommunicationContextID
    PRESENCE mandatory } |
  { ID id-CRNC-CommunicationContextID CRITICALITY reject TYPE CRNC-CommunicationContextID
    PRESENCE mandatory } |
  { ID id-RL-informationList-RL-DeletionRqst CRITICALITY notify TYPE RL-informationList-RL-
    DeletionRqst PRESENCE mandatory } ,
  ...
}

RadioLinkDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-informationList-RL-DeletionRqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-informationItemIE-RL-DeletionRqst}}

RL-informationItemIE-RL-DeletionRqst NBAP-PROTOCOL-IES ::= {
  { ID id-RL-informationItem-RL-DeletionRqst CRITICALITY notify TYPE RL-informationItem-RL-
    DeletionRqst PRESENCE mandatory }
}

RL-informationItem-RL-DeletionRqst ::= SEQUENCE {
  rL-ID RL-ID,
  iE-Extensions ProtocolExtensionContainer { { RL-informationItem-RL-DeletionRqst-ExtIEs } } OPTIONAL,
  ...
}

RL-informationItem-RL-DeletionRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK DELETION RESPONSE
--
-- *****

```

```

RadioLinkDeletionResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkDeletionResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkDeletionResponse-Extensions}}          OPTIONAL,
    ...
}

RadioLinkDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE CRNC-CommunicationContextID          PRESENCE mandatory
    } |
    { ID id-CriticalityDiagnostics              CRITICALITY ignore          TYPE CriticalityDiagnostics              PRESENCE optional },
    ...
}

RadioLinkDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DL POWER CONTROL REQUEST FDD
--
-- *****

DL-PowerControlRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DL-PowerControlRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DL-PowerControlRequest-Extensions}}          OPTIONAL,
    ...
}

DL-PowerControlRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY ignore          TYPE NodeB-CommunicationContextID          PRESENCE mandatory } |
    { ID id-PowerAdjustmentType                  CRITICALITY ignore          TYPE PowerAdjustmentType                  PRESENCE mandatory } |
    { ID id-DLReferencePower                     CRITICALITY ignore          TYPE DL-Power                             PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common'
    { ID id-InnerLoopDLPCStatus                  CRITICALITY ignore          TYPE InnerLoopDLPCStatus                  PRESENCE optional } |
    { ID id-DLReferencePowerList-DL-PC-Rqst      CRITICALITY ignore          TYPE DL-ReferencePowerInformationList-DL-PC-Rqst PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Individual'
    { ID id-MaxAdjustmentStep                    CRITICALITY ignore          TYPE MaxAdjustmentStep                    PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
    { ID id-AdjustmentPeriod                    CRITICALITY ignore          TYPE AdjustmentPeriod                    PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
    { ID id-AdjustmentRatio                      CRITICALITY ignore          TYPE ScaledAdjustmentRatio              PRESENCE conditional },
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
    ...
}

DL-PowerControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
DL-ReferencePowerInformationList-DL-PC-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{DL-ReferencePowerInformationItemIE-DL-PC-Rqst }}
```

```
DL-ReferencePowerInformationItemIE-DL-PC-Rqst NBAP-PROTOCOL-IES ::= {
  { ID id-DL-ReferencePowerInformationItem-DL-PC-Rqst      CRITICALITY      ignore      TYPE      DL-ReferencePowerInformationItem-DL-PC-Rqst
  PRESENCE      mandatory
}
}
```

```
DL-ReferencePowerInformationItem-DL-PC-Rqst ::= SEQUENCE {
  rL-ID          RL-ID,
  dl-ReferencePower      DL-Power,
  iE-Extensions      ProtocolExtensionContainer { { DL-ReferencePowerInformationItem-DL-PC-Rqst-ExtIEs } }      OPTIONAL,
  ...
}
```

```
DL-ReferencePowerInformationItem-DL-PC-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
-- *****
--
-- DL POWER TIMESLOT CONTROL REQUEST TDD
--
-- *****
```

```
DL-PowerTimeslotControlRequest ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container      {{DL-PowerTimeslotControlRequest-IEs}},
  protocolExtensions      ProtocolExtensionContainer      {{DL-PowerTimeslotControlRequest-Extensions}}      OPTIONAL,
  ...
}
```

```
DL-PowerTimeslotControlRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID      CRITICALITY      ignore      TYPE      NodeB-CommunicationContextID      PRESENCE      mandatory
  } |
  { ID id-TimeslotISCPInfo      CRITICALITY      ignore      TYPE      DL-TimeslotISCPInfo      PRESENCE      optional }, -- Mandatory for 3.84Mcps TDD
  only, Not Applicable to 1.28Mcps TDD
  ...
}
```

```
DL-PowerTimeslotControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD      CRITICALITY      ignore      EXTENSION      TimeslotISCPInfoList-LCR-DL-PC-RqstTDD      PRESENCE
  optional }, -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
  ...
}
```

```
TimeslotISCPInfoList-LCR-DL-PC-RqstTDD ::= SEQUENCE {
  dL-TimeslotISCP-LCR-Info      DL-TimeslotISCPInfoLCR, Mandatory for 1.28Mcps TDD only
  iE-Extensions      ProtocolExtensionContainer { {TimeslotISCPInfoItem-LCR-DL-PC-RqstTDD-ExtIEs} }      OPTIONAL,
  ...
}
```



```
TimeslotISCPInfoItem-LCR-DL-PC-RqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
-- *****
--
-- DEDICATED MEASUREMENT INITIATION REQUEST
--
-- *****
```

```
DedicatedMeasurementInitiationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{DedicatedMeasurementInitiationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{DedicatedMeasurementInitiationRequest-Extensions}}    OPTIONAL,
    ...
}
```

```
DedicatedMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-NodeB-CommunicationContextID      CRITICALITY  reject      TYPE      NodeB-CommunicationContextID      PRESENCE
      mandatory } |
    { ID      id-MeasurementID                    CRITICALITY  reject      TYPE      MeasurementID                        PRESENCE
      mandatory } |
    { ID      id-DedicatedMeasurementObjectType-DM-Rqst  CRITICALITY  reject      TYPE      DedicatedMeasurementObjectType-DM-Rqst  PRESENCE
      mandatory } |
    This IE represents both the Dedicated Measurement Object Type IE and the choice based on the Dedicated Measurement Object Type as described in the tabular message format in subclause 9.1.
    { ID      id-DedicatedMeasurementType          CRITICALITY  reject      TYPE      DedicatedMeasurementType            PRESENCE
      mandatory } |
    { ID      id-MeasurementFilterCoefficient      CRITICALITY  reject      TYPE      MeasurementFilterCoefficient        PRESENCE
      optional } |
    { ID      id-ReportCharacteristics            CRITICALITY  reject      TYPE      ReportCharacteristics              PRESENCE
      mandatory } |
    { ID      id-CFNReportingIndicator            CRITICALITY  reject      TYPE      CFNReportingIndicator              PRESENCE
      mandatory } |
    { ID      id-CFN                              CRITICALITY  reject      TYPE      CFN                                PRESENCE
      optional } ,
    ...
}
```

```
DedicatedMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
DedicatedMeasurementObjectType-DM-Rqst ::= CHOICE {
    rL          RL-DM-Rqst,
    rLS         RL-Set-DM-Rqst, -- for FDD only
    all-RL      AllRL-DM-Rqst,
    all-RLS     AllRL-Set-DM-Rqst, -- for FDD only
    ...
}
```

```
RL-DM-Rqst ::= SEQUENCE {
    rL-InformationList          RL-InformationList-DM-Rqst,
    iE-Extensions              ProtocolExtensionContainer { { RLItem-DM-Rqst-ExtIEs } }    OPTIONAL,
}
```

```

}
...
RLItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
RL-InformationList-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rqst }}
RL-InformationItemIE-DM-Rqst NBAP-PROTOCOL-IES ::= {
{ ID id-RL-InformationItem-DM-Rqst CRITICALITY reject TYPE RL-InformationItem-DM-Rqst PRESENCE mandatory }
}
RL-InformationItem-DM-Rqst ::= SEQUENCE {
rL-ID RL-ID,
dPCH-ID DPCH-ID OPTIONAL, -- for TDD only
iE-Extensions ProtocolExtensionContainer { { RL-InformationItem-DM-Rqst-ExtIEs } } OPTIONAL,
...
}
RL-InformationItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-PUSCH-Info-DM-Rqst CRITICALITY reject EXTENSION PUSCH-Info-DM-Rqst PRESENCE optional},
-- TDD only
...
}
PUSCH-Info-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF PUSCH-ID
RL-Set-DM-Rqst ::= SEQUENCE {
rL-Set-InformationList-DM-Rqst RL-Set-InformationList-DM-Rqst,
iE-Extensions ProtocolExtensionContainer { { RL-SetItem-DM-Rqst-ExtIEs } } OPTIONAL,
...
}
RL-SetItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
RL-Set-InformationList-DM-Rqst ::= SEQUENCE (SIZE(1..maxNrOfRLSets)) OF RL-Set-InformationItem-DM-Rqst
RL-Set-InformationItem-DM-Rqst ::= SEQUENCE {
rL-Set-ID RL-Set-ID,
iE-Extensions ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rqst-ExtIEs} } OPTIONAL,
...
}
RL-Set-InformationItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
AllRL-DM-Rqst ::= NULL

```

AllRL-Set-DM-Rqst ::= NULL

```
-- *****
--
-- DEDICATED MEASUREMENT INITIATION RESPONSE
--
-- *****
```

```
DedicatedMeasurementInitiationResponse ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{DedicatedMeasurementInitiationResponse-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{DedicatedMeasurementInitiationResponse-Extensions}}      OPTIONAL,
  ...
}
```

```
DedicatedMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID          CRITICALITY ignore TYPE CRNC-CommunicationContextID PRESENCE
  mandatory } |
  { ID id-MeasurementID                        CRITICALITY ignore TYPE MeasurementID PRESENCE
  mandatory } |
  { ID id-DedicatedMeasurementObjectType-DM-Rsp CRITICALITY ignore TYPE DedicatedMeasurementObjectType-DM-Rsp PRESENCE
  optional } |
  { ID id-CriticalityDiagnostics                CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE
  optional },
  ...
}
```

```
DedicatedMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
  rL          RL-DM-Rsp,
  rLS         RL-Set-DM-Rsp, -- for FDD only
  all-RL      RL-DM-Rsp,
  all-RLS     RL-Set-DM-Rsp, -- for FDD only
  ...
}
```

```
RL-DM-Rsp ::= SEQUENCE {
  rL-InformationList-DM-Rsp      RL-InformationList-DM-Rsp,
  IE-Extensions                  ProtocolExtensionContainer { { RLItem-DM-Rsp-ExtIEs } }      OPTIONAL,
  ...
}
```

```
RLItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
RL-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rsp }}
```

```
RL-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-DM-Rsp CRITICALITY ignore TYPE RL-InformationItem-DM-Rsp PRESENCE mandatory }
}
```

```

RL-InformationItem-DM-Rsp ::= SEQUENCE {
    rL-ID                RL-ID,
    dPCH-ID              DPCH-ID          OPTIONAL, -- for TDD only
    dedicatedMeasurementValue DedicatedMeasurementValue,
    cFN                  CFN              OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { RL-InformationItem-DM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

RL-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PUSCH-Info-DM-Rsp          CRITICALITY reject          EXTENSION PUSCH-Info-DM-Rsp          PRESENCE optional},
    -- TDD only
    ...
}

PUSCH-Info-DM-Rsp ::= SEQUENCE (SIZE (0..maxNrOfPUSCHs)) OF PUSCH-ID

RL-Set-DM-Rsp ::= SEQUENCE {
    rL-Set-InformationList-DM-Rsp      RL-Set-InformationList-DM-Rsp,
    iE-Extensions                      ProtocolExtensionContainer { { RL-SetItem-DM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

RL-SetItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rsp }}

RL-Set-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rsp          CRITICALITY ignore          TYPE          RL-Set-InformationItem-DM-Rsp          PRESENCE mandatory}
}

RL-Set-InformationItem-DM-Rsp ::= SEQUENCE {
    rL-Set-ID                RL-Set-ID,
    dedicatedMeasurementValue DedicatedMeasurementValue,
    cFN                      CFN              OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

RL-Set-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DEDICATED MEASUREMENT INITIATION FAILURE
--
-- *****

DedicatedMeasurementInitiationFailure ::= SEQUENCE {

```

```

    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementInitiationFailure-IEs}},
    protocolExtensions    ProtocolExtensionContainer {{DedicatedMeasurementInitiationFailure-Extensions}}
    ...
}

DedicatedMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID      CRITICALITY  ignore      TYPE      CRNC-CommunicationContextID      PRESENCE mandatory } |
    { ID      id-MeasurementID                    CRITICALITY  ignore      TYPE      MeasurementID                        PRESENCE mandatory } |
    } |
    { ID      id-Cause                            CRITICALITY  ignore      TYPE      Cause                                PRESENCE
    mandatory } |
    { ID      id-CriticalityDiagnostics           CRITICALITY  ignore      TYPE      CriticalityDiagnostics              PRESENCE optional },
    ...
}

DedicatedMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DEDICATED MEASUREMENT REPORT
--
-- *****

DedicatedMeasurementReport ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementReport-IEs}},
    protocolExtensions    ProtocolExtensionContainer {{DedicatedMeasurementReport-Extensions}}
    ...
}

DedicatedMeasurementReport-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID      CRITICALITY  ignore      TYPE      CRNC-CommunicationContextID
    PRESENCE mandatory } |
    { ID      id-MeasurementID                    CRITICALITY  ignore      TYPE      MeasurementID
    PRESENCE mandatory } |
    { ID      id-DedicatedMeasurementObjectType-DM-Rpirt      CRITICALITY  ignore      TYPE      DedicatedMeasurementObjectType-
    DM-Rpirt      PRESENCE mandatory } ,
    ...
}

DedicatedMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementObjectType-DM-Rpirt ::= CHOICE {
    rL                    RL-DM-Rpirt ,
    rLS                   RL-Set-DM-Rpirt , -- for FDD only
    all-RL                RL-DM-Rpirt ,
    all-RLS               RL-Set-DM-Rpirt , -- for FDD only
    ...
}

```

```

RL-DM-Rprt ::= SEQUENCE {
  rL-InformationList-DM-Rprt      RL-InformationList-DM-Rprt,
  iE-Extensions                   ProtocolExtensionContainer { { RLItem-DM-Rprt-ExtIEs } }
  ...
}

RLItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rprt }}

RL-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-DM-Rprt  CRITICALITY ignore TYPE RL-InformationItem-DM-Rprt  PRESENCE mandatory }
}

RL-InformationItem-DM-Rprt ::= SEQUENCE {
  rL-ID                           RL-ID,
  dPCH-ID                         DPCH-ID      OPTIONAL, -- for TDD only
  dedicatedMeasurementValueInformation DedicatedMeasurementValueInformation,
  iE-Extensions                   ProtocolExtensionContainer { { RL-InformationItem-DM-Rprt-ExtIEs } }
  ...
}

RL-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  {ID id-PUSCH-Info-DM-Rprt      CRITICALITY reject      EXTENSION  PUSCH-Info-DM-Rprt      PRESENCE optional},
  -- TDD only
  ...
}

PUSCH-Info-DM-Rprt ::= SEQUENCE (SIZE (0..maxNrOfPUSCHs)) OF PUSCH-ID

RL-Set-DM-Rprt ::= SEQUENCE {
  rL-Set-InformationList-DM-Rprt  RL-Set-InformationList-DM-Rprt,
  iE-Extensions                   ProtocolExtensionContainer { { RL-SetItem-DM-Rprt-ExtIEs } }
  ...
}

RL-SetItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rprt }}

RL-Set-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
  { ID id-RL-Set-InformationItem-DM-Rprt  CRITICALITY ignore  TYPE RL-Set-InformationItem-DM-Rprt  PRESENCE mandatory }
}

RL-Set-InformationItem-DM-Rprt ::= SEQUENCE {
  rL-Set-ID                       RL-Set-ID,
  dedicatedMeasurementValueInformation DedicatedMeasurementValueInformation,
  iE-Extensions                   ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rprt-ExtIEs } } OPTIONAL,
  ...
}

```

```

}

RL-Set-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- DEDICATED MEASUREMENT TERMINATION REQUEST
--
-- *****

DedicatedMeasurementTerminationRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementTerminationRequest-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{DedicatedMeasurementTerminationRequest-Extensions}}    OPTIONAL,
  ...
}

DedicatedMeasurementTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-NodeB-CommunicationContextID      CRITICALITY  ignore      TYPE      NodeB-CommunicationContextID      PRESENCE mandatory } |
  { ID      id-MeasurementID                    CRITICALITY  ignore      TYPE      MeasurementID                        PRESENCE mandatory
  },
  ...
}

DedicatedMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- DEDICATED MEASUREMENT FAILURE INDICATION
--
-- *****

DedicatedMeasurementFailureIndication ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementFailureIndication-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{DedicatedMeasurementFailureIndication-Extensions}}    OPTIONAL,
  ...
}

DedicatedMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CRNC-CommunicationContextID      CRITICALITY  ignore      TYPE      CRNC-CommunicationContextID      PRESENCE mandatory } |
  { ID      id-MeasurementID                    CRITICALITY  ignore      TYPE      MeasurementID                        PRESENCE mandatory
  } |
  { ID      id-Cause                            CRITICALITY  ignore      TYPE      Cause                            PRESENCE mandatory
  },
  ...
}

DedicatedMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

-- *****
--
-- RADIO LINK FAILURE INDICATION
--
-- *****

RadioLinkFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkFailureIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkFailureIndication-Extensions}}      OPTIONAL,
    ...
}

RadioLinkFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID      CRITICALITY    ignore          TYPE    CRNC-CommunicationContextID      PRESENCE
    mandatory } |
    { ID    id-Reporting-Object-RL-FailureInd    CRITICALITY    ignore          TYPE    Reporting-Object-RL-FailureInd    PRESENCE mandatory
    } ,
    ...
}

RadioLinkFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Reporting-Object-RL-FailureInd ::= CHOICE {
    rL                RL-RL-FailureInd,
    rL-Set            RL-Set-RL-FailureInd, --FDD only
    ...,
    cCTrCH            CCTrCH-RL-FailureInd --TDD only
}

RL-RL-FailureInd ::= SEQUENCE {
    rL-InformationList-RL-FailureInd    RL-InformationList-RL-FailureInd,
    iE-Extensions                       ProtocolExtensionContainer { { RLItem-RL-FailureInd-ExtIEs } }      OPTIONAL,
    ...
}

RLItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-FailureInd}}

RL-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
    { ID    id-RL-InformationItem-RL-FailureInd    CRITICALITY    ignore          TYPE    RL-InformationItem-RL-FailureInd      PRESENCE
    mandatory}
}

RL-InformationItem-RL-FailureInd ::= SEQUENCE {
    rL-ID                RL-ID,
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { { RL-InformationItem-RL-FailureInd-ExtIEs } }      OPTIONAL,
}

```



```

}
...
}
RL-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
RL-Set-RL-FailureInd ::= SEQUENCE {
    rL-Set-InformationList-RL-FailureInd          RL-Set-InformationList-RL-FailureInd,
    iE-Extensions                                ProtocolExtensionContainer { { RL-SetItem-RL-FailureInd-ExtIEs } } OPTIONAL,
    ...
}
RL-SetItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
RL-Set-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-FailureInd }}
RL-Set-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-RL-FailureInd    CRITICALITY ignore          TYPE RL-Set-InformationItem-RL-FailureInd    PRESENCE mandatory }
}
RL-Set-InformationItem-RL-FailureInd ::= SEQUENCE {
    rL-Set-ID          RL-Set-ID,
    cause              Cause,
    iE-Extensions      ProtocolExtensionContainer { { RL-Set-InformationItem-RL-FailureInd-ExtIEs } } OPTIONAL,
    ...
}
RL-Set-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
CCTrCH-RL-FailureInd ::= SEQUENCE {
    rL-ID          RL-ID,
    cCTrCH-InformationList-RL-FailureInd          CCTrCH-InformationList-RL-FailureInd,
    iE-Extensions                                ProtocolExtensionContainer { { CCTrCHItem-RL-FailureInd-ExtIEs } } OPTIONAL,
    ...
}
CCTrCHItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
CCTrCH-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-FailureInd }}
CCTrCH-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
    { ID id-CCTrCH-InformationItem-RL-FailureInd    CRITICALITY ignore          TYPE CCTrCH-InformationItem-RL-FailureInd    PRESENCE mandatory }
}

```

```

CCTrCH-InformationItem-RL-FailureInd ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    cause              Cause,
    iE-Extensions      ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-FailureInd-ExtIEs } } OPTIONAL,
    ...
}

CCTrCH-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK PREEMPTION REQUIRED INDICATION
--
-- *****

RadioLinkPreemptionRequiredIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkPreemptionRequiredIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkPreemptionRequiredIndication-Extensions}} OPTIONAL,
    ...
}

RadioLinkPreemptionRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE CRNC-CommunicationContextID
      PRESENCE mandatory } |
    { ID id-RL-InformationList-RL-PreemptRequiredInd CRITICALITY ignore TYPE RL-InformationList-RL-PreemptRequiredInd PRESENCE optional },
    ...
}

RadioLinkPreemptionRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-PreemptRequiredInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIE-RL-PreemptRequiredInd}}

RL-InformationItemIE-RL-PreemptRequiredInd NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-PreemptRequiredInd CRITICALITY ignore TYPE RL-InformationItem-RL-PreemptRequiredInd PRESENCE mandatory },
    ...
}

RL-InformationItem-RL-PreemptRequiredInd ::= SEQUENCE {
    rL-ID          RL-ID,
    iE-Extensions ProtocolExtensionContainer { {RL-InformationItem-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationItem-RL-PreemptRequiredInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- RADIO LINK RESTORE INDICATION
--
-- *****

RadioLinkRestoreIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkRestoreIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkRestoreIndication-Extensions}}      OPTIONAL,
    ...
}

RadioLinkRestoreIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID      CRITICALITY   ignore          TYPE      CRNC-CommunicationContextID      PRESENCE
    mandatory } |
    { ID      id-Reporting-Object-RL-RestoreInd    CRITICALITY   ignore          TYPE      Reporting-Object-RL-RestoreInd    PRESENCE mandatory
    },
    ...
}

RadioLinkRestoreIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Reporting-Object-RL-RestoreInd ::= CHOICE {
    rL              RL-RL-RestoreInd,
    rL-Set          RL-Set-RL-RestoreInd, --FDD only
    ...,
    cCTrCH          CCTrCH-RL-RestoreInd --TDD only
}

RL-RL-RestoreInd ::= SEQUENCE {
    rL-InformationList-RL-RestoreInd    RL-InformationList-RL-RestoreInd,
    iE-Extensions                       ProtocolExtensionContainer { { RLItem-RL-RestoreInd-ExtIEs } }      OPTIONAL,
    ...
}

RLItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationItemIE-RL-RestoreInd}}

RL-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
    { ID      id-RL-InformationItem-RL-RestoreInd    CRITICALITY   ignore          TYPE      RL-InformationItem-RL-RestoreInd    PRESENCE
    mandatory}
}

RL-InformationItem-RL-RestoreInd ::= SEQUENCE {
    rL-ID              RL-ID,
    iE-Extensions      ProtocolExtensionContainer { { RL-InformationItem-RL-RestoreInd-ExtIEs } }      OPTIONAL,
    ...
}

```

```

}

RL-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-RL-RestoreInd ::= SEQUENCE {
    rL-Set-InformationList-RL-RestoreInd    RL-Set-InformationList-RL-RestoreInd,
    iE-Extensions                          ProtocolExtensionContainer { { RL-SetItem-RL-RestoreInd-ExtIEs } }    OPTIONAL,
    ...
}

RL-SetItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-RestoreInd }}

RL-Set-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-RL-RestoreInd    CRITICALITY ignore          TYPE RL-Set-InformationItem-RL-RestoreInd PRESENCE mandatory }
}

RL-Set-InformationItem-RL-RestoreInd ::= SEQUENCE {
    rL-Set-ID                RL-Set-ID,
    iE-Extensions            ProtocolExtensionContainer { { RL-Set-InformationItem-RL-RestoreInd-ExtIEs } } OPTIONAL,
    ...
}

RL-Set-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCTrCH-RL-RestoreInd ::= SEQUENCE {
    rL-ID                    RL-ID,
    cCTrCH-InformationList-RL-RestoreInd    CCTrCH-InformationList-RL-RestoreInd,
    iE-Extensions            ProtocolExtensionContainer { { CCTrCHItem-RL-RestoreInd-ExtIEs } }    OPTIONAL,
    ...
}

CCTrCHItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCTrCH-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-RestoreInd }}

CCTrCH-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
    { ID id-CCTrCH-InformationItem-RL-RestoreInd    CRITICALITY ignore          TYPE CCTrCH-InformationItem-RL-RestoreInd PRESENCE mandatory }
}

CCTrCH-InformationItem-RL-RestoreInd ::= SEQUENCE {

```

```

    cCTrCH-ID
    iE-Extensions
    ...
}

```

```

CCTrCH-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- COMPRESSED MODE COMMAND FDD
--
-- *****

```

```

CompressedModeCommand ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CompressedModeCommand-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CompressedModeCommand-Extensions}}
    ...
}

```

```

CompressedModeCommand-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY ignore TYPE NodeB-CommunicationContextID PRESENCE
      mandatory } |
    { ID id-Active-Pattern-Sequence-Information CRITICALITY ignore TYPE Active-Pattern-Sequence-Information PRESENCE
      mandatory },
    ...
}

```

```

CompressedModeCommand-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- ERROR INDICATION
--
-- *****

```

```

ErrorIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{ErrorIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{ErrorIndication-Extensions}}
    ...
}

```

```

ErrorIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore TYPE CRNC-CommunicationContextID PRESENCE optional } |
    { ID id-NodeB-CommunicationContextID          CRITICALITY ignore TYPE NodeB-CommunicationContextID PRESENCE optional } |
    { ID id-Cause                                CRITICALITY ignore TYPE Cause PRESENCE
      optional } |
    { ID id-CriticalityDiagnostics                CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

```

```

}

ErrorIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- PRIVATE MESSAGE
--
-- *****

PrivateMessage ::= SEQUENCE {
    privateIEs      PrivateIE-Container {{PrivateMessage-IEs}},
    ...
}

PrivateMessage-IEs NBAP-PRIVATE-IES ::= {
    ...
}

-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****

PhysicalSharedChannelReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs      ProtocolIE-Container {{PhysicalSharedChannelReconfigurationRequestTDD-IEs}},
    protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestTDD-Extensions}}    OPTIONAL,
    ...
}

PhysicalSharedChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY reject          TYPE C-ID
      PRESENCE mandatory } |
    { ID id-SFN          CRITICALITY reject          TYPE SFN
      PRESENCE optional } |
    { ID id-PDSCHSets-AddList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-AddList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PDSCHSets-ModifyList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-ModifyList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PDSCHSets-DeleteList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-DeleteList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PUSCHSets-AddList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-AddList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PUSCHSets-ModifyList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-ModifyList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PUSCHSets-DeleteList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-DeleteList-PSCH-ReconfRqst PRESENCE
      optional },
    ...
}

```

```

PhysicalSharedChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-AddItem-PSCH-ReconfRqst

PDSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID                PDSCHSet-ID,
    pDSCH-InformationList      PDSCH-Information-AddList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PDSCH-AddInformation-LCR-PSCH-ReconfRqst PRESENCE optional},
    ...
}

PDSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-AddListIEs-PSCH-ReconfRqst }} -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD

PDSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE mandatory}
}

PDSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod            RepetitionPeriod,
    repetitionLength            RepetitionLength,
    tdd-PhysicalChannelOffset   TDD-PhysicalChannelOffset,
    dL-Timeslot-InformationAddList-PSCH-ReconfRqst DL-Timeslot-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions              ProtocolExtensionContainer { {PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTs)) OF DL-Timeslot-InformationAddItem-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                    TimeSlot,
    midambleShiftAndBurstType   MidambleShiftAndBurstType,
    tFCI-Presence               TFCI-Presence,
    dL-Code-InformationAddList-PSCH-ReconfRqst DL-Code-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions              ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

DL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF DL-Code-InformationAddItem-PSCH-ReconfRqst

DL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                PDSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions           ProtocolExtensionContainer { { DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-AddInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst } } -- Mandatory
for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD

PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst  CRITICALITY reject      TYPE      PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
    PRESENCE optional}
}

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
    dL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst      DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions           ProtocolExtensionContainer { {PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR          MidambleShiftLCR,
    tFCI-Presence              TFCI-Presence,
    dL-Code-InformationAddList-LCR-PSCH-ReconfRqst      DL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions           ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst

```



```

DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                PDSCH-ID,
    tdd-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR,
    iE-Extensions            ProtocolExtensionContainer { { DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-ModifyItem-PSCH-ReconfRqst

PDSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID                PDSCHSet-ID,
    pDSCH-InformationList      PDSCH-Information-ModifyList-PSCH-ReconfRqst,
    iE-Extensions            ProtocolExtensionContainer { {PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst    CRITICALITY reject    EXTENSION    PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst
    PRESENCE    optional}, -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
    ...
}

PDSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst } }

PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst    CRITICALITY reject    TYPE    PDSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE    optional} -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod            RepetitionPeriod                OPTIONAL,
    repetitionLength            RepetitionLength                OPTIONAL,
    tdd-PhysicalChannelOffset    TDD-PhysicalChannelOffset    OPTIONAL,
    dL-Timeslot-InformationModifyList-PSCH-ReconfRqst    DL-Timeslot-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                    TimeSlot,
    midambleShiftAndBurstType    MidambleShiftAndBurstType    OPTIONAL,
    tFCI-Presence                TFCI-Presence    OPTIONAL,
    dL-Code-InformationModifyList-PSCH-ReconfRqst    DL-Code-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,

```

```

    iE-Extensions          ProtocolExtensionContainer { { DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                PDSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions          ProtocolExtensionContainer { { DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst          CRITICALITY reject          TYPE          PDSCH-ModifyInformation-LCR-
ModifyItem-PSCH-ReconfRqst          PRESENCE          mandatory}
}

PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod          OPTIONAL,
    repetitionLength          RepetitionLength          OPTIONAL,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
    dL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst          DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst          OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs} }
OPTIONAL,
    ...
}

PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR          MidambleShiftLCR          OPTIONAL,
    tFCI-Presence              TFCI-Presence          OPTIONAL,
    dL-Code-LCR-InformationModifyList-PSCH-ReconfRqst          DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst          OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }
OPTIONAL,
    ...
}

DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                PDSCH-ID,
    tdd-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR,
    iE-Extensions            ProtocolExtensionContainer { { DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-DeleteItem-PSCH-ReconfRqst

PDSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID            PDSCHSet-ID,
    iE-Extensions            ProtocolExtensionContainer { {PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-AddItem-PSCH-ReconfRqst

PUSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID            PUSCHSet-ID,
    pUSCH-InformationList    PUSCH-Information-AddList-PSCH-ReconfRqst    OPTIONAL, to 1.28Mcps TDD -- Mandatory for 3.84Mcps TDD, Not Applicable
    iE-Extensions            ProtocolExtensionContainer { {PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst    CRITICALITY reject    EXTENSION    PUSCH-AddInformation-LCR-PSCH-ReconfRqst    PRESENCE
    optional}, to 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
    ...
}

PUSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-AddListIEs-PSCH-ReconfRqst }} to 3.84Mcps TDD only -- Mandatory for

PUSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-AddListIE-PSCH-ReconfRqst    CRITICALITY reject    TYPE    PUSCH-Information-AddItem-PSCH-ReconfRqst    PRESENCE
    mandatory}
}

PUSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {

```

```

repetitionPeriod          RepetitionPeriod,
repetitionLength          RepetitionLength,
tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
uL-Timeslot-InformationAddList-PSCH-ReconfRqst  UL-Timeslot-InformationAddList-PSCH-ReconfRqst,
iE-Extensions             ProtocolExtensionContainer { {PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
...
}

PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-PSCH-ReconfRqst

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
timeslot                TimeSlot,
midambleShiftAndBurstType MidambleShiftAndBurstType,
tFCI-Presence           TFCI-Presence,
uL-Code-InformationAddList-PSCH-ReconfRqst  UL-Code-InformationAddList-PSCH-ReconfRqst,
iE-Extensions           ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
...
}

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF UL-Code-InformationAddItem-PSCH-ReconfRqst

UL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
pUSCH-ID                PUSCH-ID,
tdd-ChannelisationCode  TDD-ChannelisationCode,
iE-Extensions           ProtocolExtensionContainer { { UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
...
}

UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PUSCH-AddInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst }}

PUSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
{ID id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst  CRITICALITY reject      TYPE      PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
PRESENCE optional}
}

PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
repetitionPeriod          RepetitionPeriod,
repetitionLength          RepetitionLength,
tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
uL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst  UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
iE-Extensions             ProtocolExtensionContainer { {PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,

```

```

...
}
PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst
UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
timeSlotLCR TimeSlotLCR,
midambleShiftLCR MidambleShiftLCR,
tFCI-Presence TFCI-Presence,
uL-Code-InformationAddList-LCR-PSCH-ReconfRqst UL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
iE-Extensions ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
...
}
UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
UL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst
UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
pUSCH-ID PUSCH-ID,
tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
iE-Extensions ProtocolExtensionContainer { { UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
...
}
UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
PUSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-ModifyItem-PSCH-ReconfRqst
PUSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
pUSCHSet-ID PUSCHSet-ID,
pUSCH-InformationList PUSCH-Information-ModifyList-PSCH-ReconfRqst OPTIONAL, -- Applicable to 3.84Mcps TDD
only
iE-Extensions ProtocolExtensionContainer { {PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
...
}
PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ID id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst
PRESENCE optional}, -- Applicable to For 1.28Mcps TDD only
...
}
PUSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst }} -- For 3.84Mcps
TDD-only

```

```

PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
  {ID id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst  CRITICALITY reject      TYPE      PUSCH-Information-ModifyItem-PSCH-ReconfRqst
  PRESENCE      mandatory}
}

PUSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod      OPTIONAL,
  repetitionLength      RepetitionLength      OPTIONAL,
  tdd-PhysicalChannelOffset  TDD-PhysicalChannelOffset  OPTIONAL,
  uL-Timeslot-InformationModifyList-PSCH-ReconfRqst  UL-Timeslot-InformationModifyList-PSCH-ReconfRqst  OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { {PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} }  OPTIONAL,
  ...
}

PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlot              TimeSlot,
  midambleShiftAndBurstType  MidambleShiftAndBurstType  OPTIONAL,
  tFCI-Presence          TFCI-Presence  OPTIONAL,
  uL-Code-InformationModifyList-PSCH-ReconfRqst  UL-Code-InformationModifyList-PSCH-ReconfRqst  OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { { UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }  OPTIONAL,
  ...
}

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  pUSCH-ID              PUSCH-ID,
  tdd-ChannelisationCode  TDD-ChannelisationCode,
  iE-Extensions          ProtocolExtensionContainer { { UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }  OPTIONAL,
  ...
}

UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRqst } }

PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
  {ID id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst  CRITICALITY reject      TYPE      PUSCH-ModifyInformation-LCR-
  ModifyItem-PSCH-ReconfRqst  PRESENCE      optional}
}

```

```

PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod          OPTIONAL,
    repetitionLength          RepetitionLength          OPTIONAL,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
    uL-Timeslot-InformationModifyList-LCR-PSCH-ReconfRqst  UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst  OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    ...
}

PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR              TimeSlotLCR,
    midambleShiftLCR        MidambleShiftLCR          OPTIONAL,
    tFCI-Presence            TFCI-Presence              OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst  UL-Code-InformationModifyList-PSCH-ReconfRqst  OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                  PUSCH-ID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    iE-Extensions              ProtocolExtensionContainer { { UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-DeleteItem-PSCH-ReconfRqst

PUSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID              PUSCHSet-ID,
    iE-Extensions              ProtocolExtensionContainer { {PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    ...
}

PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE TDD
--
-- *****

PhysicalSharedChannelReconfigurationResponseTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{PhysicalSharedChannelReconfigurationResponseTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationResponseTDD-Extensions}}
    ...
}
OPTIONAL,

PhysicalSharedChannelReconfigurationResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics      CRITICALITY  ignore      TYPE      CriticalityDiagnostics      PRESENCE optional },
    ...
}

PhysicalSharedChannelReconfigurationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE TDD
--
-- *****

PhysicalSharedChannelReconfigurationFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{PhysicalSharedChannelReconfigurationFailureTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationFailureTDD-Extensions}}
    ...
}
OPTIONAL,

PhysicalSharedChannelReconfigurationFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CauseLevel-PSCH-ReconfFailureTDD      CRITICALITY ignore      TYPE      CauseLevel-PSCH-ReconfFailureTDD      PRESENCE mandatory }|
    { ID      id-CriticalityDiagnostics      CRITICALITY ignore      TYPE      CriticalityDiagnostics      PRESENCE optional },
    ...
}

PhysicalSharedChannelReconfigurationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CauseLevel-PSCH-ReconfFailureTDD ::= CHOICE {
    generalCause          GeneralCauseList-PSCH-ReconfFailureTDD,
    setSpecificCause      SetSpecificCauseList-PSCH-ReconfFailureTDD,
    ...
}

```



```

GeneralCauseList-PSCH-ReconfFailureTDD ::= SEQUENCE {
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { { GeneralCauseItem-PSCH-ReconfFailureTDD-ExtIEs } }    OPTIONAL,
    ...
}

GeneralCauseItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SetSpecificCauseList-PSCH-ReconfFailureTDD ::= SEQUENCE {
    unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD Unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD    OPTIONAL,
    unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD Unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { SetSpecificCauseItem-PSCH-ReconfFailureTDD-ExtIEs } }    OPTIONAL,
    ...
}

SetSpecificCauseItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxNrOfPDSCHSets)) OF ProtocolIE-Single-Container {{ Unsuccessful-
PDSCHSetItemIE-PSCH-ReconfFailureTDD }}

Unsuccessful-PDSCHSetItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID    id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD    CRITICALITY ignore    TYPE Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDDPRESENCE
mandatory}
}

Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
    pDSCHSet-ID          PDSCHSet-ID,
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { {Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} }    OPTIONAL,
    ...
}

Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxNrOfPUSCHSets)) OF ProtocolIE-Single-Container {{ Unsuccessful-
PUSCHSetItemIE-PSCH-ReconfFailureTDD }}

Unsuccessful-PUSCHSetItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID    id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD    CRITICALITY ignore    TYPE Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDDPRESENCE
mandatory}
}

Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
    pUSCHSet-ID          PUSCHSet-ID,
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { {Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} }    OPTIONAL,
    ...
}

```

```

}

Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RESET REQUEST
--
-- *****

ResetRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{ResetRequest-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{ResetRequest-Extensions}}  OPTIONAL,
  ...
}

ResetRequest-IEs NBAP-PROTOCOL-IES ::= {
  {ID id-ResetIndicator      CRITICALITY ignore      TYPE      ResetIndicator      PRESENCE      mandatory},
  ...
}

ResetRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

ResetIndicator ::= CHOICE {
  communicationContext      CommunicationContextList-Reset,
  communicationControlPort  CommunicationControlPortList-Reset,
  nodeB                      NULL,
  ...
}

CommunicationContextList-Reset ::= SEQUENCE {
  communicationContextInfoList-Reset  CommunicationContextInfoList-Reset,
  iE-Extensions                        ProtocolExtensionContainer  {{CommunicationContextItem-Reset-ExtIEs}}  OPTIONAL,
  ...
}

CommunicationContextItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CommunicationContextInfoList-Reset ::= SEQUENCE (SIZE (1.. maxCommunicationContext))  OF ProtocolIE-Single-Container
  {{ CommunicationContextInfoItemIE-Reset }}

CommunicationContextInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
  {ID id-CommunicationContextInfoItem-Reset      CRITICALITY reject      TYPE CommunicationContextInfoItem-Reset      PRESENCE mandatory}
}

CommunicationContextInfoItem-Reset ::= SEQUENCE {
  communicationContextType-Reset      CommunicationContextType-Reset,

```

```

    iE-Extensions          ProtocolExtensionContainer { { CommunicationContextInfoItem-Reset-ExtIEs } }    OPTIONAL,
    ...
}

CommunicationContextInfoItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommunicationContextType-Reset ::= CHOICE {
    cRNC-CommunicationContextID          CRNC-CommunicationContextID,
    nodeB-CommunicationContextID        NodeB-CommunicationContextID,
    ...
}

CommunicationControlPortList-Reset ::= SEQUENCE {
    communicationControlPortInfoList-Reset    CommunicationControlPortInfoList-Reset,
    iE-Extensions          ProtocolExtensionContainer { {CommunicationControlPortItem-Reset-ExtIEs} }    OPTIONAL,
    ...
}

CommunicationControlPortItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommunicationControlPortInfoList-Reset ::= SEQUENCE (SIZE (1.. maxCCPinNodeB)) OF ProtocolIE-Single-Container {{CommunicationControlPortInfoItemIE-Reset }}

CommunicationControlPortInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
    {ID id-CommunicationControlPortInfoItem-Reset          CRITICALITY reject          TYPE CommunicationControlPortInfoItem-Reset          PRESENCE mandatory}
}

CommunicationControlPortInfoItem-Reset ::= SEQUENCE {
    communicationControlPortID          CommunicationControlPortID,
    iE-Extensions          ProtocolExtensionContainer { {CommunicationControlPortInfoItem-Reset-ExtIEs} } OPTIONAL,
    ...
}

CommunicationControlPortInfoItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RESET RESPONSE
--
-- *****

ResetResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container {{ResetResponse-IEs}},
    protocolExtensions    ProtocolExtensionContainer {{ResetResponse-Extensions}}    OPTIONAL,
    ...
}

```

```

ResetResponse-IEs NBAP-PROTOCOL-IES ::= {
  {ID id-CriticalityDiagnostics      CRITICALITY      ignore      TYPE      CriticalityDiagnostics      PRESENCE optional},
  ...
}

ResetResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- INFORMATION EXCHANGE INITIATION REQUEST
--
-- *****

InformationExchangeInitiationRequest ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container      {{InformationExchangeInitiationRequest-IEs}},
  protocolExtensions      ProtocolExtensionContainer      {{InformationExchangeInitiationRequest-Extensions}}      OPTIONAL,
  ...
}

InformationExchangeInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-InformationExchangeID      CRITICALITY reject      TYPE      InformationExchangeID
    PRESENCE      mandatory      }|
  { ID      id-InformationExchangeObjectType-InfEx-Rqst      CRITICALITY reject      TYPE      InformationExchangeObjectType-
  InfEx-Rqst      PRESENCE      mandatory      }|
  -- This IE represents both the Information Exchange Object Type IE and the choice based on the Information Exchange Object Type
  -- as described in the tabular message format in subclause 9.1.
  { ID      id-InformationType      CRITICALITY reject      TYPE      InformationType      PRESENCE mandatory
  }|
  { ID      id-InformationReportCharacteristics      CRITICALITY reject      TYPE      InformationReportCharacteristics
    PRESENCE      mandatory},
  ...
}

InformationExchangeInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

InformationExchangeObjectType-InfEx-Rqst ::= CHOICE {
  cell      Cell-InfEx-Rqst,
  ...
}

Cell-InfEx-Rqst ::= SEQUENCE {
  c-ID      C-ID,
  iE-Extensions      ProtocolExtensionContainer      { { CellItem-InfEx-Rqst-ExtIEs} }      OPTIONAL,
  ...
}

CellItem-InfEx-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

-- *****
--
-- INFORMATION EXCHANGE INITIATION RESPONSE
--
-- *****

InformationExchangeInitiationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{InformationExchangeInitiationResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{InformationExchangeInitiationResponse-Extensions}}    OPTIONAL,
    ...
}

InformationExchangeInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-InformationExchangeID          CRITICALITY ignore          TYPE          InformationExchangeID
      PRESENCE mandatory }|
    { ID      id-InformationExchangeObjectType-InfEx-Rsp          CRITICALITY ignore          TYPE          InformationExchangeObjectType-InfEx-Rsp          PRESENCE
      optional }|
    { ID      id-CriticalityDiagnostics          CRITICALITY ignore          TYPE          CriticalityDiagnostics          PRESENCE optional },
    ...
}

InformationExchangeInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

InformationExchangeObjectType-InfEx-Rsp ::= CHOICE {
    cell                Cell-InfEx-Rsp,
    ...
}

Cell-InfEx-Rsp ::= SEQUENCE {
    requestedDataValue   RequestedDataValue,
    iE-Extensions        ProtocolExtensionContainer { { CellItem-InfEx-Rsp-ExtIEs } }    OPTIONAL,
    ...
}

CellItem-InfEx-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- INFORMATION EXCHANGE INITIATION FAILURE
--
-- *****

InformationExchangeInitiationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{InformationExchangeInitiationFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{InformationExchangeInitiationFailure-Extensions}}    OPTIONAL,
    ...
}

```

```

InformationExchangeInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-InformationExchangeID          CRITICALITY ignore          TYPE      InformationExchangeID          PRESENCE mandatory }|
  { ID      id-Cause                          CRITICALITY ignore          TYPE      Cause                          PRESENCE mandatory }|
  { ID      id-CriticalityDiagnostics          CRITICALITY ignore          TYPE      CriticalityDiagnostics          PRESENCE optional },
  ...
}

InformationExchangeInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- INFORMATION REPORT
--
-- *****

InformationReport ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{InformationReport-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{InformationReport-Extensions}}    OPTIONAL,
  ...
}

InformationReport-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-InformationExchangeID          CRITICALITY ignore          TYPE      InformationExchangeID          PRESENCE mandatory }|
  { ID      id-InformationExchangeObjectType-InfEx-Rprt CRITICALITY ignore          TYPE      InformationExchangeObjectType-InfEx-Rprt PRESENCE mandatory },
  ...
}

InformationReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

InformationExchangeObjectType-InfEx-Rprt ::= CHOICE {
  cell                  Cell-Inf-Rprt,
  ...
}

Cell-Inf-Rprt ::= SEQUENCE {
  requestedDataValueInformation RequestedDataValueInformation,
  iE-Extensions           ProtocolExtensionContainer {{ CellItem-Inf-Rprt-ExtIEs }}    OPTIONAL,
  ...
}

CellItem-Inf-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--

```

```

-- INFORMATION EXCHANGE TERMINATION REQUEST
--
-- *****

InformationExchangeTerminationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{InformationExchangeTerminationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{InformationExchangeTerminationRequest-Extensions}}
    ...
}

InformationExchangeTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-InformationExchangeID          CRITICALITY ignore          TYPE      InformationExchangeID          PRESENCE mandatory},
    ...
}

InformationExchangeTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- INFORMATION EXCHANGE FAILURE INDICATION
--
-- *****

InformationExchangeFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{InformationExchangeFailureIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{InformationExchangeFailureIndication-Extensions}}
    ...
}

InformationExchangeFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-InformationExchangeID          CRITICALITY ignore          TYPE      InformationExchangeID          PRESENCE mandatory } |
    { ID      id-Cause                          CRITICALITY ignore          TYPE      Cause                          PRESENCE mandatory },
    ...
}

InformationExchangeFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SYNCHRONISATION INITIATION REQUEST TDD
--
-- *****

CellSynchronisationInitiationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationInitiationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{CellSynchronisationInitiationRequestTDD-Extensions}}
    ...
}

```

```

CellSynchronisationInitiationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationInitiationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID CRITICALITY reject TYPE C-ID PRESENCE mandatory }|
    { ID id-cellSyncBurstRepetitionPeriod CRITICALITY reject TYPE CellSyncBurstRepetitionPeriod PRESENCE mandatory }|
    { ID id-timeslotInfo-CellSyncInitiationRqstTDD CRITICALITY reject TYPE TimeslotInfo-CellSyncInitiationRqstTDD PRESENCE
    mandatory }|
    { ID id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD CRITICALITY reject TYPE CellSyncBurstTransInit-
CellSyncInitiationRqstTDD PRESENCE optional }|
    { ID id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD CRITICALITY reject TYPE CellSyncBurstMeasureInit-
CellSyncInitiationRqstTDD PRESENCE optional },
    ...
}

CellSyncBurstTransInit-CellSyncInitiationRqstTDD ::= SEQUENCE {
    cSBTransmissionID CSBTransmissionID,
    sfn SFN,
    cellSyncBurstCode CellSyncBurstCode,
    cellSyncBurstCodeShift CellSyncBurstCodeShift,
    initialDLTransPower DL-Power,
    iE-Extensions ProtocolExtensionContainer { { CellSyncBurstTransInit-CellSyncInitiationRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

CellSyncBurstTransInit-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeslotInfo-CellSyncInitiationRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlot

CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD ::= SEQUENCE {
    cSBMeasurementID CSBMeasurementID,
    cellSyncBurstCode CellSyncBurstCode,
    cellSyncBurstCodeShift CellSyncBurstCodeShift,
    synchronisationReportType SynchronisationReportType,
    sfn SFN OPTIONAL,
    synchronisationReportCharacteristics SynchronisationReportCharacteristics,
    iE-Extensions ProtocolExtensionContainer { { CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SYNCHRONISATION INITIATION RESPONSE TDD
--
-- *****

```



```

CellSynchronisationInitiationResponseTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationInitiationResponseTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{CellSynchronisationInitiationResponseTDD-Extensions}}    OPTIONAL,
    ...
}

CellSynchronisationInitiationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationInitiationResponseTDD-IEs NBAP-PROTOCOL-IEs ::= {
    { ID      id-CriticalityDiagnostics          CRITICALITY      ignore      TYPE      CriticalityDiagnostics          PRESENCE
    optional  },
    ...
}

-- *****
--
-- CELL SYNCHRONISATION INITIATION FAILURE TDD
--
-- *****

CellSynchronisationInitiationFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationInitiationFailureTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{CellSynchronisationInitiationFailureTDD-Extensions}}    OPTIONAL,
    ...
}

CellSynchronisationInitiationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationInitiationFailureTDD-IEs NBAP-PROTOCOL-IEs ::= {
    { ID      id-Cause          CRITICALITY      ignore      TYPE      Cause          PRESENCE mandatory
    }|
    { ID      id-CriticalityDiagnostics          CRITICALITY      ignore      TYPE      CriticalityDiagnostics          PRESENCE optional },
    ...
}

-- *****
--
-- CELL SYNCHRONISATION RECONFIGURATION REQUEST TDD
--
-- *****

CellSynchronisationReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationReconfigurationRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{CellSynchronisationReconfigurationRequestTDD-Extensions}}    OPTIONAL,
    ...
}

CellSynchronisationReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

CellSynchronisationReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-C-ID CRITICALITY reject TYPE C-ID PRESENCE mandatory
  }|
  { ID id-TimeSlot CRITICALITY reject TYPE TimeSlot PRESENCE mandatory }|
  { ID id-NCyclesPerSFNperiod CRITICALITY reject TYPE NCyclesPerSFNperiod PRESENCE mandatory }|
  { ID id-NRepetitionsPerCyclePeriod CRITICALITY reject TYPE NRepetitionsPerCyclePeriod PRESENCE mandatory }|
  { ID id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD CRITICALITY reject TYPE
  CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD PRESENCE optional }|
  { ID id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD CRITICALITY reject TYPE
  CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD PRESENCE optional },
  ...
}

CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstTransInfoItem-
CellSyncReconfRqstTDD

CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
  cSBTransmissionID CSBTransmissionID,
  syncFrameNumberToTransmit SyncFrameNumber,
  cellSyncBurstCode CellSyncBurstCode OPTIONAL,
  cellSyncBurstCodeShift CellSyncBurstCodeShift OPTIONAL,
  dlTransPower DL-Power OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD-ExtIEs }
  OPTIONAL,
  ...
}

CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD ::= ProtocolIE-Single-Container { { CellSyncBurstMeasInfo-CellSyncReconfRqstTDD } }

CellSyncBurstMeasInfo-CellSyncReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD CRITICALITY reject TYPE CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD PRESENCE
  mandatory }|
  { ID id-SynchronisationReportType CRITICALITY reject TYPE SynchronisationReportType PRESENCE
  optional }|
  { ID id-SynchronisationReportCharacteristics CRITICALITY reject TYPE SynchronisationReportCharacteristics PRESENCE optional },
  ...
}

CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD

CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
  syncFrameNrToReceive SyncFrameNumber,
  syncBurstInfo CellSyncBurstInfoList-CellSyncReconfRqstTDD,
  ...
}

CellSyncBurstInfoList-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfoItem-CellSyncReconfRqstTDD

```

```

CellSyncBurstInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
    cSBMeasurementID          CSBMeasurementID,
    cellSyncBurstCode        CellSyncBurstCode,
    cellSyncBurstCodeShift   CellSyncBurstCodeShift,
    iE-Extensions            ProtocolExtensionContainer { { CellSyncBurstMeasInfo-CellSyncReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

CellSyncBurstMeasInfo-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- CELL SYNCHRONISATION RECONFIGURATION RESPONSE TDD
--
-- *****

```

```

CellSynchronisationReconfigurationResponseTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationReconfigurationResponseTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSynchronisationReconfigurationResponseTDD-Extensions}} OPTIONAL,
    ...
}

```

```

CellSynchronisationReconfigurationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

CellSynchronisationReconfigurationResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics          CRITICALITY   ignore      TYPE      CriticalityDiagnostics          PRESENCE optional },
    ...
}

```

```

-- *****
--
-- CELL SYNCHRONISATION RECONFIGURATION FAILURE TDD
--
-- *****

```

```

CellSynchronisationReconfigurationFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationReconfigurationFailureTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSynchronisationReconfigurationFailureTDD-Extensions}} OPTIONAL,
    ...
}

```

```

CellSynchronisationReconfigurationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

CellSynchronisationReconfigurationFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-Cause          CRITICALITY   ignore      TYPE      Cause          PRESENCE mandatory
    }|
}

```

```

    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

-- *****
--
-- CELL SYNCHRONISATION ADJUSTMENT REQUEST TDD
--
-- *****

CellSynchronisationAdjustmentRequestTDD ::= SEQUENCE {
    protocolIEs ProtocolIE-Container {{CellSynchronisationAdjustmentRequestTDD-IEs}},
    protocolExtensions ProtocolExtensionContainer {{CellSynchronisationAdjustmentRequestTDD-Extensions}} OPTIONAL,
    ...
}

CellSynchronisationAdjustmentRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationAdjustmentRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CellAdjustmentInfo-SyncAdjustmntRqstTDD CRITICALITY ignore TYPE CellAdjustmentInfo-SyncAdjustmentRqstTDD PRESENCE mandatory },
    ...
}

CellAdjustmentInfo-SyncAdjustmentRqstTDD ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ CellAdjustmentInfoItemIE-
SyncAdjustmntRqstTDD }}

CellAdjustmentInfoItemIE-SyncAdjustmntRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD CRITICALITY ignore TYPE CellAdjustmentInfoItem-
SyncAdjustmentRqstTDD PRESENCE mandatory }
}

CellAdjustmentInfoItem-SyncAdjustmentRqstTDD ::= SEQUENCE {
    c-ID C-ID,
    frameAdjustmentValue FrameAdjustmentValue OPTIONAL,
    timingAdjustmentValue TimingAdjustmentValue OPTIONAL,
    dlTransPower DL-Power OPTIONAL,
    sfn SFN OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { CellAdjustmentInfoItem-SyncAdjustmntRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

CellAdjustmentInfoItem-SyncAdjustmntRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SYNCHRONISATION ADJUSTMENT RESPONSE TDD
--
-- *****

```

```

CellSynchronisationAdjustmentResponseTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationAdjustmentResponseTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{{CellSynchronisationAdjustmentResponseTDD-Extensions}}}  OPTIONAL,
    ...
}

CellSynchronisationAdjustmentResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationAdjustmentResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics          CRITICALITY  ignore      TYPE      CriticalityDiagnostics          PRESENCE optional },
    ...
}

-- *****
--
-- CELL SYNCHRONISATION ADJUSTMENT FAILURE TDD
--
-- *****

CellSynchronisationAdjustmentFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationAdjustmentFailureTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{{CellSynchronisationAdjustmentFailureTDD-Extensions}}}  OPTIONAL,
    ...
}

CellSynchronisationAdjustmentFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationAdjustmentFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CauseLevel-SyncAdjustmntFailureTDD  CRITICALITY  ignore      TYPE      CauseLevel-SyncAdjustmntFailureTDD  PRESENCE mandatory },
    { ID      id-CriticalityDiagnostics              CRITICALITY  ignore      TYPE      CriticalityDiagnostics              PRESENCE optional
    },
    ...
}

CauseLevel-SyncAdjustmntFailureTDD ::= CHOICE {
    generalCause          GeneralCauseList-SyncAdjustmntFailureTDD,
    cellSpecificCause     CellSpecificCauseList-SyncAdjustmntFailureTDD,
    ...
}

GeneralCauseList-SyncAdjustmntFailureTDD ::= SEQUENCE {
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { { GeneralCauseList-SyncAdjustmntFailureTDD-ExtIEs } }  OPTIONAL,
    ...
}

GeneralCauseList-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

CellSpecificCauseList-SyncAdjustmntFailureTDD ::= SEQUENCE {
    unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD      Unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD,
    iE-Extensions                ProtocolExtensionContainer { { CellSpecificCauseList-SyncAdjustmntFailureTDD-ExtIEs } }      OPTIONAL,
    ...
}

CellSpecificCauseList-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs))      OF ProtocolIE-Single-Container
{{ Unsuccessful-cell-InformationRespItemIE-SyncAdjustmntFailureTDD }}

Unsuccessful-cell-InformationRespItemIE-SyncAdjustmntFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD      CRITICALITY      ignore      TYPE      Unsuccessful-
cell-InformationRespItem-SyncAdjustmntFailureTDD      PRESENCE      mandatory},
    ...
}

Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD ::= SEQUENCE {
    c-ID                C-ID,
    cause                Cause,
    iE-Extensions                ProtocolExtensionContainer { { Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD-
ExtIEs } }      OPTIONAL,
    ...
}

Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SYNCHRONISATION TERMINATION REQUEST TDD
--
-- *****

CellSynchronisationTerminationRequestTDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container      {{CellSynchronisationTerminationRequestTDD-IEs}},
    protocolExtensions                ProtocolExtensionContainer      {{CellSynchronisationTerminationRequestTDD-Extensions}}      OPTIONAL,
    ...
}

CellSynchronisationTerminationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationTerminationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID                CRITICALITY      ignore      TYPE      C-ID                PRESENCE      mandatory }|
    { ID      id-CSBTransmissionID      CRITICALITY      ignore      TYPE      CSBTransmissionID      PRESENCE      optional }|
    { ID      id-CSBMeasurementID      CRITICALITY      ignore      TYPE      CSBMeasurementID      PRESENCE      optional }|
    ...
}

```

```

}

-- *****
--
-- CELL SYNCHRONISATION FAILURE INDICATION TDD
--
-- *****

CellSynchronisationFailureIndicationTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSynchronisationFailureIndicationTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSynchronisationFailureIndicationTDD-Extensions}}    OPTIONAL,
    ...
}

CellSynchronisationFailureIndicationTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationFailureIndicationTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY  ignore      TYPE      C-ID          PRESENCE mandatory }|
    { ID      id-CSBTransmissionID  CRITICALITY  ignore      TYPE      CSBTransmissionID  PRESENCE optional }|
    { ID      id-CSBMeasurementID  CRITICALITY  ignore      TYPE      CSBMeasurementID  PRESENCE optional }|
    { ID      id-Cause         CRITICALITY  ignore      TYPE      Cause          PRESENCE mandatory }|
    ...
}

-- *****
--
-- CELL SYNCHRONISATION REPORT TDD
--
-- *****

CellSynchronisationReportTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSynchronisationReportTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSynchronisationReportTDD-Extensions}}    OPTIONAL,
    ...
}

CellSynchronisationReportTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationReportTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CellSyncInfo-CellSyncReprtTDD  CRITICALITY  ignore      TYPE      CellSyncInfo-CellSyncReprtTDD  PRESENCE mandatory },
    ...
}

CellSyncInfo-CellSyncReprtTDD ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ CellSyncInfoItemIE-CellSyncReprtTDD }}

CellSyncInfoItemIE-CellSyncReprtTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY  ignore      TYPE      C-ID          PRESENCE mandatory }|

```

```

    { ID      id-SyncReportType-CellSyncReprtTDD      CRITICALITY ignore      TYPE SyncReportType-CellSyncReprtTDD      PRESENCE optional},
    ...
}

SyncReportType-CellSyncReprtTDD ::= CHOICE {
    intStdPhSyncInfo-CellSyncReprtTDD      IntStdPhCellSyncInfo-CellSyncReprtTDD,
    lateEntrantCell      NULL,
    frequencyAcquisition      NULL,
    ...
}

IntStdPhCellSyncInfo-CellSyncReprtTDD ::= SEQUENCE {
    cellSyncBurstMeasuredInfo      CellSyncBurstMeasInfoList-CellSyncReprtTDD,
    iE-Extensions      ProtocolExtensionContainer { { IntStdPhCellSyncInfoList-CellSyncReprtTDD-ExtIEs} } OPTIONAL,
    ...
}

IntStdPhCellSyncInfoList-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSyncBurstMeasInfoList-CellSyncReprtTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-CellSyncReprtTDD

CellSyncBurstMeasInfoItem-CellSyncReprtTDD ::= SEQUENCE {
    sFN      SFN,
    cellSyncBurstInfo-CellSyncReprtTDD      SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfo-CellSyncReprtTDD,
    ...
}

CellSyncBurstInfo-CellSyncReprtTDD ::= CHOICE {
    cellSyncBurstAvailable      CellSyncBurstAvailable-CellSyncReprtTDD,
    cellSyncBurstNotAvailable      NULL,
    ...
}

CellSyncBurstAvailable-CellSyncReprtTDD ::= SEQUENCE {
    cellSyncBurstTiming      CellSyncBurstTiming,
    cellSyncBurstSIR      CellSyncBurstSIR,
    ...
}

END

```

9.3.4 Information Elements Definitions

```

--*****
--
-- Information Element Definitions
--
--*****

```



```
NBAP-IEs {  
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)  
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-IEs (2) }
```

```
DEFINITIONS AUTOMATIC TAGS ::=  
BEGIN
```

```
IMPORTS
```

```
maxNrOfTFCs,  
maxNrOfErrors,  
maxCTFC,  
maxNrOfTFs,  
maxTTL-count,  
maxRateMatching,  
maxCodeNrComp-1,  
maxNrOfCellSyncBursts,  
maxNrOfCodeGroups,  
maxNrOfMeasNCell,  
maxNrOfMeasNCell-1,  
maxNrOfReceiptsPerSyncFrame,  
maxNrOfTFCIGroups,  
maxNrOfTFCI1Combs,  
maxNrOfTFCI2Combs,  
maxNrOfTFCI2Combs-1,  
maxNrOfSF,  
maxTGPS,  
maxNrOfUSCHs,  
maxNrOfULTSs,  
maxNrOfULTSLCRs,  
maxNrOfDPCHs,  
maxNrOfDPCHLCRs,  
maxNrOfCodes,  
maxNrOfDSCHs,  
maxNrOfDLTSs,  
maxNrOfDLTSLCRs,  
maxNrOfDCHs,  
maxNrOfLevels,  
maxNoGPSItems,  
maxNoSat,
```

```
id-MessageStructure,  
id-ReportCharacteristicsType-OnModification,  
id-Rx-Timing-Deviation-Value-LCR,  
id-SFNsFNMeasurementValueInformation,  
id-SFNsFNMeasurementThresholdInformation,  
id-TUTRANGPSMeasurementValueInformation,  
id-TUTRANGPSMeasurementThresholdInformation,  
id-TypeOfError
```

```
FROM NBAP-Constants
```

```
Criticality,  
ProcedureID,  
ProtocolIE-ID,
```

```

    TransactionID,
    TriggeringMessage
FROM NBAP-CommonDataTypes

    NBAP-PROTOCOL-IES,
    ProtocolExtensionContainer{},
    ProtocolIE-Single-Container{},
    NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers;

-- =====
-- A
-- =====

Acknowledged-PCPCH-access-preambles ::= INTEGER (0..15,...)
-- According to mapping in [22].

Acknowledged-PRACH-preambles-Value ::= INTEGER(0..240,...)
-- According to mapping in [22].The number of L1 acknowledged random access tries per every 20 ms period.

AddorDeleteIndicator ::= ENUMERATED {
    add,
    delete
}

Active-Pattern-Sequence-Information ::= SEQUENCE {
    cmConfigurationChangeCFN          CFN,
    transmission-Gap-Pattern-Sequence-Status  Transmission-Gap-Pattern-Sequence-Status-List  OPTIONAL,
    iE-Extensions                      ProtocolExtensionContainer { {Active-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
    ...
}

Active-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Transmission-Gap-Pattern-Sequence-Status-List ::= SEQUENCE (SIZE (0..maxTGPS)) OF
    SEQUENCE {
        tGPSID          TGPSID,
        tGPRC           TGPRC,
        tGCFN           CFN,
        iE-Extensions  ProtocolExtensionContainer { { Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs } } OPTIONAL,
        ...
    }

Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AICH-Power ::= INTEGER (-22..5)
-- Offset in dB.

AICH-TransmissionTiming ::= ENUMERATED {

```

```

    v0,
    v1
}

AllocationRetentionPriority ::= SEQUENCE {
    priorityLevel          PriorityLevel,
    pre-emptionCapability  Pre-emptionCapability,
    pre-emptionVulnerability Pre-emptionVulnerability,
    iE-Extensions         ProtocolExtensionContainer { {AllocationRetentionPriority-ExtIEs} } OPTIONAL,
    ...
}

AllocationRetentionPriority-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

APPreambleSignature ::= INTEGER (0..15)

APSubChannelNumber ::= INTEGER (0..11)

AvailabilityStatus ::= ENUMERATED {
    empty,
    in-test,
    failed,
    power-off,
    off-line,
    off-duty,
    dependency,
    degraded,
    not-installed,
    log-full,
    ...
}

-- =====
-- B
-- =====

BCCH-ModificationTime ::= INTEGER (0..511)
-- Time = BCCH-ModificationTime * 8
-- Range 0 to 4088, step 8
-- All SFN values in which MIB may be mapped are allowed

BindingID ::= OCTET STRING (SIZE (1..4, ...))

BetaCD ::= INTEGER (0..15)

BlockingPriorityIndicator ::= ENUMERATED {
    high,
    normal,
    low,
    ...
}

```

```
-- High priority: Block resource immediately.
-- Normal priority: Block resource when idle or upon timer expiry.
-- Low priority: Block resource when idle.
```

```
SCTD-Indicator ::= ENUMERATED {
    active,
    inactive
}
```

```
-- =====
-- C
-- =====
```

```
Cause ::= CHOICE {
    radioNetwork          CauseRadioNetwork,
    transport             CauseTransport,
    protocol              CauseProtocol,
    misc                 CauseMisc,
    ...
}
```

```
CauseMisc ::= ENUMERATED {
    control-processing-overload,
    hardware-failure,
    oam-intervention,
    not-enough-user-plane-processing-resources,
    unspecified,
    ...
}
```

```
CauseProtocol ::= ENUMERATED {
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified,
    abstract-syntax-error-falsely-constructed-message,
    ...
}
```

```
CauseRadioNetwork ::= ENUMERATED {
    unknown-C-ID,
    cell-not-available,
    power-level-not-supported,
    dl-radio-resources-not-available,
    ul-radio-resources-not-available,
    r1-already-ActivatedOrAllocated,
    nodeB-Resources-unavailable,
    measurement-not-supported-for-the-object,
    combining-resources-not-available,
    requested-configuration-not-supported,
    synchronisation-failure,

```

```
priority-transport-channel-established,  
sIB-Origination-in-Node-B-not-Supported,  
requested-tx-diversity-mode-not-supported,  
unspecified,  
bCCH-scheduling-error,  
measurement-temporarily-not-available,  
invalid-CM-settings,  
reconfiguration-CFN-not-elapsed,  
number-of-DL-codes-not-supported,  
s-cipch-not-supported,  
combining-not-supported,  
ul-sf-not-supported,  
dl-SF-not-supported,  
common-transport-channel-type-not-supported,  
dedicated-transport-channel-type-not-supported,  
downlink-shared-channel-type-not-supported,  
uplink-shared-channel-type-not-supported,  
cm-not-supported,  
tx-diversity-no-longer-supported,  
unknown-Local-Cell-ID,  
...,  
number-of-UL-codes-not-supported,  
information-temporarily-not-available,  
information-provision-not-supported-for-the-object,  
cell-synchronisation-not-supported,  
cell-synchronisation-adjustment-not-supported,  
dpc-mode-change-not-supported,  
iPDL-already-activated,  
iPDL-not-supported,  
iPDL-parameters-not-available,  
frequency-acquisition-not-supported  
}
```

```
CauseTransport ::= ENUMERATED {  
    transport-resource-unavailable,  
    unspecified,  
    ...  
}
```

```
CCTrCH-ID ::= INTEGER (0..15)
```

```
CDSUBCHANNELNUMBERS ::= BIT STRING {  
    subCh11(0),  
    subCh10(1),  
    subCh9(2),  
    subCh8(3),  
    subCh7(4),  
    subCh6(5),  
    subCh5(6),  
    subCh4(7),  
    subCh3(8),  
    subCh2(9),  
    subCh1(10),
```

```

        subCh0(11)
        } (SIZE (12))

CellParameterID ::= INTEGER (0..127,...)

CellSyncBurstAvailabilityIndicator ::= ENUMERATED {
    cellSyncBurstAvailable,
    cellSyncBurstNotAvailable
}

CellSyncBurstCode ::= INTEGER(0..7, ...)

CellSyncBurstCodeShift ::= INTEGER(0..7)

CellSyncBurstRepetitionPeriod ::= INTEGER (0..4095)

CellSyncBurstSIR ::= INTEGER (0..31)

CellSyncBurstTiming ::= CHOICE {
    initialPhase      INTEGER (0..1048575),
    steadyStatePhase  INTEGER (0..255)
}

CellSyncBurstTimingThreshold ::= INTEGER(0..254)

CFN ::= INTEGER (0..255)

Channel-Assignment-Indication ::= ENUMERATED {
    cA-Active,
    cA-Inactive
}

ChipOffset ::= INTEGER (0..38399)
-- Unit Chip

C-ID ::= INTEGER (0..65535)

Closedlooptimingadjustmentmode ::= ENUMERATED {
    adj-1-slot,
    adj-2-slot,
    ...
}

CommonChannelsCapacityConsumptionLaw ::= SEQUENCE (SIZE(1..maxNrOfSF)) OF
SEQUENCE {
    dl-Cost      INTEGER (0..65535),
    ul-Cost      INTEGER (0..65535),
    iE-Extensions ProtocolExtensionContainer { { CommonChannelsCapacityConsumptionLaw-ExtIEs } } OPTIONAL,
    ...
}

CommonChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...

```

```

}

CommonMeasurementAccuracy ::= CHOICE {
    tUTRANGPSMeasurementAccuracyClass    TUTRANGPSAccuracyClass,
    ...
}

CommonMeasurementType ::= ENUMERATED {
    received-total-wide-band-power,
    transmitted-carrier-power,
    acknowledged-prach-preambles,
    ul-timeslot-iscp,
    acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles,
    ...,
    uTRAN-GPS-Timing-of-Cell-Frames-for-LCSUE-Positioning,
    sFN-SFN-Observed-Time-Difference
}

CommonMeasurementValue ::= CHOICE {
    transmitted-carrier-power            Transmitted-Carrier-Power-Value,
    received-total-wide-band-power       Received-total-wide-band-power-Value,
    acknowledged-prach-preambles         Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP                      UL-TimeslotISCP-Value,
    acknowledged-PCPCH-access-preambles Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles      Detected-PCPCH-access-preambles,
    ...,
    extension-CommonMeasurementValue     Extension-CommonMeasurementValue
}

Extension-CommonMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementValueIE }}

Extension-CommonMeasurementValueIE NBAP-PROTOCOL-IES ::= {
    { ID id-TUTRANGPSMeasurementValueInformation    CRITICALITY ignore TYPE TUTRANGPSMeasurementValueInformation PRESENCE mandatory }|
    { ID id-SFN-SFNMeasurementValueInformation     CRITICALITY ignore TYPE SFN-SFNMeasurementValueInformation PRESENCE mandatory }
}

CommonMeasurementValueInformation ::= CHOICE {
    measurementAvailable        CommonMeasurementAvailable,
    measurementnotAvailable     CommonMeasurementnotAvailable
}

CommonMeasurementAvailable ::= SEQUENCE {
    commonmeasurementValue      CommonMeasurementValue,
    ie-Extensions                ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs} } OPTIONAL,
    ...
}

CommonMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonMeasurementnotAvailable ::= NULL

```

CommonPhysicalChannelID ::= INTEGER (0..255)

```
Common-PhysicalChannel-Status-Information ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    resourceOperationalState     ResourceOperationalState,
    availabilityStatus           AvailabilityStatus,
    iE-Extensions                ProtocolExtensionContainer { { Common-PhysicalChannel-Status-Information-ExtIEs} } OPTIONAL,
    ...
}
```

```
Common-PhysicalChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

CommonTransportChannelID ::= INTEGER (0..255)

```
CommonTransportChannel-InformationResponse ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    bindingID                     BindingID OPTIONAL,
    transportLayerAddress         TransportLayerAddress OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { CommonTransportChannel-InformationResponse-ExtIEs} } OPTIONAL,
    ...
}
```

```
CommonTransportChannel-InformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
Common-TransportChannel-Status-Information ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    resourceOperationalState     ResourceOperationalState,
    availabilityStatus           AvailabilityStatus,
    iE-Extensions                ProtocolExtensionContainer { { Common-TransportChannel-Status-Information-ExtIEs} } OPTIONAL,
    ...
}
```

```
Common-TransportChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

CommunicationControlPortID ::= INTEGER (0..65535)

```
Compressed-Mode-Deactivation-Flag ::= ENUMERATED {
    deactivate,
    maintain-Active
}
on=deactivate
```

ConfigurationGenerationID ::= INTEGER (0..255)
 -- Value '0' means "No configuration"

ConstantValue ::= INTEGER (-10..10,...)
 -- -10 dB - +10 dB


```
-- unit dB
-- step 1 dB
```

```
CPCH-Allowed-Total-Rate ::= ENUMERATED {
    v15,
    v30,
    v60,
    v120,
    v240,
    v480,
    v960,
    v1920,
    v2880,
    v3840,
    v4800,
    v5760,
    ...
}

CPCHScramblingCodeNumber ::= INTEGER (0..79)

CPCH-UL-DPCCH-SlotFormat ::= INTEGER (0..2,...)

CriticalityDiagnostics ::= SEQUENCE {
    procedureID          ProcedureID          OPTIONAL,
    triggeringMessage    TriggeringMessage    OPTIONAL,
    procedureCriticality Criticality          OPTIONAL,
    transactionID       TransactionID        OPTIONAL,
    iEsCriticalityDiagnostics CriticalityDiagnostics-IE-List OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} } OPTIONAL,
    ...
}

CriticalityDiagnostics-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
SEQUENCE {
    iECriticality    Criticality,
    iE-ID           ProtocolIE-ID,
    repetitionNumber RepetitionNumber0 OPTIONAL,
    iE-Extensions   ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} } OPTIONAL,
    ...
}

CriticalityDiagnostics-IE-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MessageStructure    CRITICALITY ignore    EXTENSION MessageStructure    PRESENCE optional    }|
    { ID id-TypeOfError         CRITICALITY ignore    EXTENSION TypeOfError        PRESENCE mandatory   }|,
    ...
}
```

```
MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
```

```

SEQUENCE {
  iE-ID ProtocolIE-ID,
  repetitionNumber RepetitionNumber1 OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
  ...
}

```

```

MessageStructure-ExtIEs-NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

CRNC-CommunicationContextID ::= INTEGER (0..1048575)

CSBMeasurementID ::= INTEGER (0..65535)

CSBTransmissionID ::= INTEGER (0..65535)

```

-- =====
-- D
-- =====

```

DATA-ID ::= INTEGER (0..3)

DCH-ID ::= INTEGER (0..255)

DCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-FDD-InformationItem

```

DCH-FDD-InformationItem ::= SEQUENCE {
  payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
  ul-FP-Mode UL-FP-Mode,
  toAWS ToAWS,
  toAWE ToAWE,
  dCH-SpecificInformationList DCH-Specific-FDD-InformationList,
  iE-Extensions ProtocolExtensionContainer { { DCH-FDD-InformationItem-ExtIEs } } OPTIONAL,
  ...
}

```

```

DCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

DCH-Specific-FDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-FDD-Item

```

DCH-Specific-FDD-Item ::= SEQUENCE {
  dCH-ID DCH-ID,
  ul-TransportFormatSet TransportFormatSet,
  dl-TransportFormatSet TransportFormatSet,
  allocationRetentionPriority AllocationRetentionPriority,
  frameHandlingPriority FrameHandlingPriority,
  qE-Selector QE-Selector,
  iE-Extensions ProtocolExtensionContainer { { DCH-Specific-FDD-Item-ExtIEs } } OPTIONAL,
  ...
}

```

```

}

DCH-Specific-FDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem

DCH-InformationResponseItem ::= SEQUENCE {
    dCH-ID                DCH-ID,
    bindingID             BindingID OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { DCH-InformationResponseItem-ExtIEs } } OPTIONAL,
    ...
}

DCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-TDD-InformationItem

DCH-TDD-InformationItem ::= SEQUENCE {
    payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
    ul-FP-Mode                  UL-FP-Mode,
    toAWS                       ToAWS,
    toAWE                       ToAWE,
    dCH-SpecificInformationList DCH-Specific-TDD-InformationList,
    iE-Extensions              ProtocolExtensionContainer { { DCH-TDD-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

DCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-Specific-TDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-TDD-Item

DCH-Specific-TDD-Item ::= SEQUENCE {
    dCH-ID                DCH-ID,
    ul-CCTrCH-ID         CCTrCH-ID,
    dl-CCTrCH-ID         CCTrCH-ID,
    ul-TransportFormatSet TransportFormatSet,
    dl-TransportFormatSet TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority FrameHandlingPriority,
    qE-Selector          QE-Selector OPTIONAL,
    -- This IE shall be present if DCH is part of set of Coordinated DCHs
    iE-Extensions        ProtocolExtensionContainer { { DCH-Specific-TDD-Item-ExtIEs } } OPTIONAL,
    ...
}

DCH-Specific-TDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
FDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifyItem

FDD-DCHs-to-ModifyItem ::= SEQUENCE {
    ul-FP-Mode          UL-FP-Mode          OPTIONAL,
    toAWS               ToAWS               OPTIONAL,
    toAWE               ToAWE               OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    dCH-SpecificInformationList DCH-ModifySpecificInformation-FDD,
    iE-Extensions      ProtocolExtensionContainer { { FDD-DCHs-to-ModifyItem-ExtIEs } } OPTIONAL,
    ...
}

FDD-DCHs-to-ModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifySpecificInformation-FDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-FDD

DCH-ModifySpecificItem-FDD ::= SEQUENCE {
    dCH-ID              DCH-ID,
    ul-TransportFormatSet TransportFormatSet OPTIONAL,
    dl-TransportFormatSet TransportFormatSet OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority FrameHandlingPriority OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { { DCH-ModifySpecificItem-FDD-ExtIEs } } OPTIONAL,
    ...
}

DCH-ModifySpecificItem-FDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifyItem-TDD

DCH-ModifyItem-TDD ::= SEQUENCE {
    ul-FP-Mode          UL-FP-Mode          OPTIONAL,
    toAWS               ToAWS               OPTIONAL,
    toAWE               ToAWE               OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    dCH-SpecificInformationList DCH-ModifySpecificInformation-TDD,
    iE-Extensions      ProtocolExtensionContainer { { TDD-DCHs-to-ModifyItem-ExtIEs } } OPTIONAL,
    ...
}

TDD-DCHs-to-ModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifySpecificInformation-TDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-TDD

```

```

DCH-ModifySpecificItem-TDD ::= SEQUENCE {
    dCH-ID                               DCH-ID,
    ul-CCTrCH-ID                         CCTrCH-ID           OPTIONAL,
    dl-CCTrCH-ID                         CCTrCH-ID           OPTIONAL,
    ul-TransportFormatSet                TransportFormatSet  OPTIONAL,
    dl-TransportFormatSet                TransportFormatSet  OPTIONAL,
    allocationRetentionPriority           AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority                 FrameHandlingPriority OPTIONAL,
    iE-Extensions                         ProtocolExtensionContainer { { DCH-ModifySpecificItem-TDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

DCH-ModifySpecificItem-TDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DedicatedChannelsCapacityConsumptionLaw ::= SEQUENCE ( SIZE(1..maxNrOfSF) ) OF
SEQUENCE {
    dl-Cost-1      INTEGER (0..65535),
    dl-Cost-2      INTEGER (0..65535),
    ul-Cost-1      INTEGER (0..65535),
    ul-Cost-2      INTEGER (0..65535),
    iE-Extensions  ProtocolExtensionContainer { { DedicatedChannelsCapacityConsumptionLaw-ExtIEs } } OPTIONAL,
    ...
}

```

```

DedicatedChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DedicatedMeasurementType ::= ENUMERATED {
    sir,
    sir-error,
    transmitted-code-power,
    rscp,
    rx-timing-deviation,
    round-trip-time,
    ...,
    rx-timing-deviation-LCR
}

```

```

DedicatedMeasurementValue ::= CHOICE {
    sIR-Value          SIR-Value,
    sIR-ErrorValue     SIR-Error-Value,
    transmittedCodePowerValue  Transmitted-Code-Power-Value,
    rSCP              RSCP-Value,
    rxTimingDeviationValue  Rx-Timing-Deviation-Value,
    roundTripTime     Round-Trip-Time-Value,
    ...,
    extension-DedicatedMeasurementValue  Extension-DedicatedMeasurementValue
}

```

```

Extension-DedicatedMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-DedicatedMeasurementValueIE }}

Extension-DedicatedMeasurementValueIE NBAP-PROTOCOL-IES ::= {
  { ID id-Rx-Timing-Deviation-Value-LCR    CRITICALITY reject  TYPE Rx-Timing-Deviation-Value-LCR  PRESENCE mandatory }
}

DedicatedMeasurementValueInformation ::= CHOICE {
  measurementAvailable      DedicatedMeasurementAvailable,
  measurementnotAvailable   DedicatedMeasurementnotAvailable
}

DedicatedMeasurementAvailable ::= SEQUENCE {
  dedicatedmeasurementValue  DedicatedMeasurementValue,
  cFN                        CFN                      OPTIONAL,
  ie-Extensions              ProtocolExtensionContainer { { DedicatedMeasurementAvailableItem-ExtIEs } }    OPTIONAL,
  ...
}

DedicatedMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DedicatedMeasurementnotAvailable ::= NULL

Detected-PCPCH-access-preambles ::= INTEGER (0..240,...)
-- According to mapping in [22].

DeltaSIR ::= INTEGER (0..30)
-- Unit dB, Step 0.1 dB, Range 0..3 dB.

DGPSCorrections ::= SEQUENCE {
  gpstow      GPSTOW,
  status-health  GPS-Status-Health,
  satelliteinfo  SAT-Info-DGPSCorrections,
  ie-Extensions  ProtocolExtensionContainer { { DGPSCorrections-ExtIEs } }    OPTIONAL,
  ...
}

DGPSCorrections-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DGPSThresholds ::= SEQUENCE {
  prcdeviation  PRCDeviation,
  ie-Extensions  ProtocolExtensionContainer { { DGPSThresholds-ExtIEs } }    OPTIONAL,
  ...
}

DGPSThresholds-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DiversityControlField ::= ENUMERATED {

```

```

    may,
    must,
    must-not,
    ...
}

DiversityMode ::= ENUMERATED {
    none,
    sTTD,
    closed-loop-mode1,
    closed-loop-mode2,
    ...
}

DL-DPCH-SlotFormat ::= INTEGER (0..16,...)

DL-Timeslot-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationItem

DL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tFCI-Presence           TFCI-Presence,
    dL-Code-Information     TDD-DL-Code-Information,
    iE-Extensions           ProtocolExtensionContainer { { DL-Timeslot-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

DL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-TimeslotLCR-InformationItem

DL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR,
    tFCI-Presence              TFCI-Presence,
    dL-Code-LCR-Information     TDD-DL-Code-LCR-Information,
    iE-Extensions              ProtocolExtensionContainer { { DL-TimeslotLCR-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

DL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-FrameType ::= ENUMERATED {
    typeA,
    typeB,
    ...
}

DL-or-Global-CapacityCredit ::= INTEGER (0..65535)

```

```

DL-Power ::= INTEGER (-350..150)
-- DL-Power = power * 10
-- If Power <=-35 DL-Power shall be set to -350
-- if Power >=15 DL-Power shall be set to 150
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB

DLPowerAveragingWindowSize ::= INTEGER (1..60)

DL-ScramblingCode ::= INTEGER (0..15)
-- 0= Primary scrambling code of the cell, 1..15= Secondary scrambling code --

DL-TimeslotISCP ::= INTEGER (0..91)

DL-TimeslotISCPInfo ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-TimeslotISCPInfoItem

DL-TimeslotISCPInfoItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    dL-TimeslotISCP          DL-TimeslotISCP,
    iE-Extensions            ProtocolExtensionContainer { {DL-TimeslotISCPInfoItem-ExtIEs} } OPTIONAL,
    ...
}

DL-TimeslotISCPInfoItem-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-TimeslotISCPInfoLCR ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-TimeslotISCPInfoItemLCR

DL-TimeslotISCPInfoItemLCR ::= SEQUENCE {
    timeSlotLCR              TimeSlotLCR,
    dL-TimeslotISCP          DL-TimeslotISCP,
    iE-Extensions            ProtocolExtensionContainer { {DL-TimeslotISCPInfoItemLCR-ExtIEs} } OPTIONAL,
    ...
}

DL-TimeslotISCPInfoItemLCR-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-TPC-Pattern01Count ::= INTEGER (0..30,...)

Downlink-Compressed-Mode-Method ::= ENUMERATED {
    puncturing,
    sFdiv2,
    higher-layer-scheduling,
    ...
}

DPC-Mode ::= ENUMERATED {
    mode0,
    mode1,
    ...
}

```



```

}

DPCH-ID ::= INTEGER (0..239)

DSCH-ID ::= INTEGER (0..255)

DSCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-InformationResponseItem

DSCH-InformationResponseItem ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    bindingID              BindingID                OPTIONAL,
    transportLayerAddress  TransportLayerAddress   OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { DSCH-InformationResponseItem-ExtIEs } } OPTIONAL,
    ...
}

DSCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-FDD-Common-Information ::= SEQUENCE {
    enhancedDSCHPCIndicator    EnhancedDSCHPCIndicator    OPTIONAL,
    enhancedDSCHPC            EnhancedDSCHPC            OPTIONAL,
    -- The IE shall be present if the Enhanced DSCH PC Indicator IE is set to "Enhanced DSCH PC Active in the UE".
    iE-Extensions            ProtocolExtensionContainer { { DSCH-FDD-Common-Information-ExtIEs } } OPTIONAL,
    ...
}

DSCH-FDD-Common-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-FDD-InformationItem

DSCH-FDD-InformationItem ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    transportFormatSet     TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority  FrameHandlingPriority,
    toAWS                 ToAWS,
    toAWE                 ToAWE,
    iE-Extensions         ProtocolExtensionContainer { { DSCH-FDD-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

DSCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-TDD-InformationItem

DSCH-TDD-InformationItem ::= SEQUENCE {
    dSCH-ID                DSCH-ID,

```

```

    cCTrCH-ID                CCTrCH-ID,
    transportFormatSet       TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority    FrameHandlingPriority,
    toAWS                    ToAWS,
    toAWE                    ToAWE,
    iE-Extensions           ProtocolExtensionContainer { { DSCH-TDD-InformationItem-ExtIEs } }
    ...
}

DSCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DwPCH-Power ::= INTEGER (-150..400,...)
-- DwPCH-power = power * 10
-- If power <= -15 DwPCH shall be set to -150
-- If power >= 40 DwPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB

-- =====
-- E
-- =====

End-Of-Audit-Sequence-Indicator ::= ENUMERATED {
    end-of-audit-sequence,
    not-end-of-audit-sequence
}

EnhancedDSCHPC ::= SEQUENCE {
    enhancedDSCHPCWnd      EnhancedDSCHPCWnd,
    enhancedDSCHPCCounter  EnhancedDSCHPCCounter,
    enhancedDSCHPowerOffset EnhancedDSCHPowerOffset,
    ...
}

EnhancedDSCHPCCounter ::= INTEGER (1..50)

EnhancedDSCHPCIndicator ::= ENUMERATED {
    enhancedDSCHPCActiveInTheUE,
    enhancedDSCHPCNotActiveInTheUE
}

EnhancedDSCHPCWnd ::= INTEGER (1..10)

EnhancedDSCHPowerOffset ::= INTEGER (-15..0)

-- =====
-- F
-- =====

FDD-DL-ChannelisationCodeNumber ::= INTEGER(0.. 511)
-- According to the mapping in [9]. The maximum value is equal to the DL spreading factor -1--

```

FDD-DL-CodeInformation ::= SEQUENCE (SIZE (1..maxNrOfCodes)) OF FDD-DL-CodeInformationItem

```
FDD-DL-CodeInformationItem ::= SEQUENCE {
    dl-ScramblingCode                DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
    transmissionGapPatternSequenceCodeInformation  TransmissionGapPatternSequenceCodeInformation
    iE-Extensions                    ProtocolExtensionContainer { { FDD-DL-CodeInformationItem-ExtIEs } }
    ...
}
```

```
FDD-DL-CodeInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

FDD-S-CCPCH-Offset ::= INTEGER (0..149)
 -- 0: 0 chip, 1: 256 chip, 2: 512 chip, .. ,149: 38144 chip [7] --

```
FDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size0-5,
    step-size1,
    step-size1-5,
    step-size2,
    ...
}
```

```
FirstRLS-Indicator ::= ENUMERATED {
    first-RLS,
    not-first-RLS,
    ...
}
```

```
FNReportingIndicator ::= ENUMERATED {
    fN-reporting-required,
    fN-reporting-not-required
}
```

FrameHandlingPriority ::= INTEGER (0..15)
 -- 0=lower priority, 15=higher priority --

FrameAdjustmentValue ::= INTEGER(0..4095)

FrameOffset ::= INTEGER (0..255)

FPACH-Power ::= INTEGER (-150..400,...) -- FPACH-power = power * 10
 -- If power <= -15 FPACH shall be set to -150
 -- If power >= 40 FPACH shall be set to 400
 -- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB

```
-- =====
-- G
-- =====
```

```

GapLength ::= INTEGER (1..14)
-- Unit slot

GapDuration ::= INTEGER (1..144,...)
-- Unit frame

GPS-Almanac ::= SEQUENCE {
    wna-alm BIT STRING (SIZE (8)),
    sat-info-almanac SAT-Info-Almanac,
    sVGlobalHealth-alm BIT STRING (SIZE (364)) OPTIONAL,
    ie-Extensions ProtocolExtensionContainer { { GPS-Almanac-ExtIEs} } OPTIONAL,
    ...
}

GPS-Almanac-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-Ionospheric-Model ::= SEQUENCE {
    alpha-zero-ionos BIT STRING (SIZE (8)),
    alpha-one-ionos BIT STRING (SIZE (8)),
    alpha-two-ionos BIT STRING (SIZE (8)),
    alpha-three-ionos BIT STRING (SIZE (8)),
    beta-zero-ionos BIT STRING (SIZE (8)),
    beta-one-ionos BIT STRING (SIZE (8)),
    beta-two-ionos BIT STRING (SIZE (8)),
    beta-three-ionos BIT STRING (SIZE (8)),
    ie-Extensions ProtocolExtensionContainer { { GPS-Ionospheric-Model-ExtIEs} } OPTIONAL,
    ...
}

GPS-Ionospheric-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-Information ::= SEQUENCE (SIZE (0..maxNoGPSItems)) OF GPS-Information-Item
This IE shall be present if the Information Type Item IE indicates 'GPS Information'

GPS-Information-Item ::= ENUMERATED {
    gps-navigation-model-and-time-recovery,
    gps-ionospheric-model,
    gps-utc-model,
    gps-almanac,
    gps-rt-integrity,
    ...
}

GPS-RealTime-Integrity ::= CHOICE {
    bad-satellites GPSBadSat-Info-RealTime-Integrity,
    no-bad-satellites NULL
}

```

```

GPSBadSat-Info-RealTime-Integrity ::= SEQUENCE {
    sat-info          SATInfo-RealTime-Integrity,
    ie-Extensions    ProtocolExtensionContainer { { GPSBadSat-Info-RealTime-Integrity-ExtIEs} }
    ...
}

GPSBadSat-Info-RealTime-Integrity-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-NavandRecovery-Item ::= SEQUENCE (SIZE (1..maxNoSat)) OF GPS-NavandRecovery-Item

GPS-NavandRecovery-Item ::= SEQUENCE {
    tx-tow-nav          INTEGER (0..1048575),
    sat-id-nav          SAT-ID,
    tlm-message-nav    BIT STRING (SIZE (14)),
    tlm-revd-c-nav     BIT STRING (SIZE (2)),
    ho-word-nav        BIT STRING (SIZE (22)),
    w-n-nav            BIT STRING (SIZE (10)),
    ca-or-p-on-l2-nav  BIT STRING (SIZE (2)),
    user-range-accuracy-index-nav BIT STRING (SIZE (4)),
    sv-health-nav      BIT STRING (SIZE (6)),
    iodc-nav           BIT STRING (SIZE (10)),
    l2-p-dataflag-nav  BIT STRING (SIZE (1)),
    sfl-reserved-nav   BIT STRING (SIZE (87)),
    t-gd-nav           BIT STRING (SIZE (8)),
    t-oc-nav           BIT STRING (SIZE (16)),
    a-f-2-nav          BIT STRING (SIZE (8)),
    a-f-1-nav          BIT STRING (SIZE (16)),
    a-f-zero-nav       BIT STRING (SIZE (22)),
    c-rs-nav           BIT STRING (SIZE (16)),
    delta-n-nav        BIT STRING (SIZE (16)),
    m-zero-nav         BIT STRING (SIZE (32)),
    c-uc-nav           BIT STRING (SIZE (16)),
    gps-e-nav          BIT STRING (SIZE (32)),
    c-us-nav           BIT STRING (SIZE (16)),
    a-sqrt-nav         BIT STRING (SIZE (32)),
    t-oe-nav           BIT STRING (SIZE (16)),
    fit-interval-flag-nav BIT STRING (SIZE (1)),
    aodo-nav           BIT STRING (SIZE (5)),
    c-ic-nav           BIT STRING (SIZE (16)),
    omega-zero-nav     BIT STRING (SIZE (32)),
    c-is-nav           BIT STRING (SIZE (16)),
    i-zero-nav         BIT STRING (SIZE (32)),
    c-rc-nav           BIT STRING (SIZE (16)),
    gps-omega-nav      BIT STRING (SIZE (32)),
    omegadot-nav       BIT STRING (SIZE (24)),
    idot-nav           BIT STRING (SIZE (14)),
    spare-zero-fill    BIT STRING (SIZE (20)),
    ie-Extensions     ProtocolExtensionContainer { { GPS-NavandRecovery-Item-ExtIEs} }
    ...
}

```

OPTIONAL,

OPTIONAL,

```
GPS-NavandRecovery-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
GPS-RX-POS ::= SEQUENCE {
  latitudeSign      ENUMERATED {north, south},
  latitude          INTEGER (0..8388607),
  longitude         INTEGER (-8388608..8388607),
  directionOfAltitude ENUMERATED {height, depth},
  altitude          INTEGER (0..32767),
  iE-Extensions     ProtocolExtensionContainer { { GPS-RX-POS-ExtIEs } } OPTIONAL,
  ...
}
```

```
GPS-RX-POS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
GPS-Status-Health ::= ENUMERATED {
  udre-scale-1dot0,
  udre-scale-0dot75,
  udre-scale-0dot5,
  udre-scale-0dot3,
  udre-scale-0dot1,
  no-data,
  invalid-data
}
```

```
GPSTOW ::= INTEGER (0..604799)
```

```
GPS-UTC-Model ::= SEQUENCE {
  a-one-utc      BIT STRING (SIZE (24)),
  a-zero-utc     BIT STRING (SIZE (32)),
  t-ot-utc       BIT STRING (SIZE (8)),
  delta-t-ls-utc BIT STRING (SIZE (8)),
  w-n-t-utc      BIT STRING (SIZE (8)),
  w-n-lsf-utc    BIT STRING (SIZE (8)),
  dn-utc         BIT STRING (SIZE (8)),
  delta-t-lsf-utc BIT STRING (SIZE (8)),
  iE-Extensions  ProtocolExtensionContainer { { GPS-UTC-Model-ExtIEs } } OPTIONAL,
  ...
}
```

```
GPS-UTC-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
-- =====
-- H
-- =====
-- =====
```

```

-- I
-- =====

IB-OC-ID ::= INTEGER (1..16)

IB-SG-DATA ::= BIT STRING
-- Contains SIB data fixed" or "SIB data variable" in segment as encoded in ref.[18].

IB-SG-POS ::= INTEGER (0..4094)
-- Only even positions allowed

IB-SG-REP ::= ENUMERATED {rep4, rep8, rep16, rep32, rep64, rep128, rep256, rep512, rep1024, rep2048, rep4096}

IB-Type ::= ENUMERATED {
    mIB,
    sB1,
    sB2,
    sIB1,
    sIB2,
    sIB3,
    sIB4,
    sIB5,
    sIB6,
    sIB7,
    sIB8,
    sIB9,
    sIB10,
    sIB11,
    sIB12,
    sIB13,
    sIB13dot1,
    sIB13dot2,
    sIB13dot3,
    sIB13dot4,
    sIB14,
    sIB15,
    sIB15dot1,
    sIB15dot2,
    sIB15dot3,
    sIB16,
    ...,
    sIB17,
    sIB15dot4,
    sIB18
}

IndicationType ::= ENUMERATED {
    noFailure,
    serviceImpacting,
    ...
}

InformationReportCharacteristics ::= CHOICE {

```

```

onDemand          NULL,
periodic          InformationReportCharacteristicsType-ReportPeriodicity,
onModification    InformationReportCharacteristicsType-OnModification,
...
}

InformationReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
  min              ReportPeriodicity-Scaledmin,
  hours           ReportPeriodicity-Scaledhour,
  ...
}

InformationReportCharacteristicsType-OnModification ::= SEQUENCE {
  information-thresholds InformationThresholds OPTIONAL,
  ie-Extensions          ProtocolExtensionContainer { { InformationReportCharacteristicsType-OnModification-ExtIEs } } OPTIONAL,
  ...
}

InformationReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

InformationThresholds ::= CHOICE {
  dgps          DGPSThresholds,
  ...
}

InformationExchangeID ::= INTEGER (0..1048575)

InformationType ::= SEQUENCE {
  information-Type-Item Information-Type-Item,
  gpsInformation        GPS-Information OPTIONAL,
  -- The IE shall be present if the Information Type Item IE indicates "GPS Information".
  iE-Extensions        ProtocolExtensionContainer { { Information-Type-ExtIEs } } OPTIONAL,
  ...
}

Information-Type-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Information-Type-Item ::= ENUMERATED {
  gpsinformation,
  dgpscorrections,
  gpsrxpos,
  ...
}

InnerLoopDLPCStatus ::= ENUMERATED {
  active,
  inactive
}

```



```

IPDL-Indicator ::= ENUMERATED {
    active,
    inactive
}

IPDL-FDD-Parameters ::= SEQUENCE {
    iP-SpacingFDD      ENUMERATED{sp5,sp7,sp10,sp15,sp20,sp30,sp40,sp50,...},
    iP-Length          ENUMERATED{len5, len10},
    seed               INTEGER(1..63),
    burstModeParams    BurstModeParams      OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { { IPDLFDDParameter-ExtIEs } } OPTIONAL,
    ...
}

IPDLFDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IPDL-TDD-Parameters ::= SEQUENCE {
    iP-SpacingTDD      ENUMERATED{sp30,sp40,sp50,sp70,sp100,...},
    iP-Start           INTEGER(0..4095),
    iP-Slot            INTEGER(0..14),
    iP-PCCPCH          ENUMERATED{switchOff-1-Frame,switchOff-2-Frames},
    burstModeParams    BurstModeParams      OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { { IPDLTDDParameter-ExtIEs } } OPTIONAL,
    ...
}

BurstModeParams ::= SEQUENCE {
    burstStart         INTEGER(0..15),
    burstLenth         INTEGER(10..25),
    burstFreq          INTEGER(1..16),
    ...
}

IPDLTDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- =====
-- J
-- =====

-- =====
-- K
-- =====

-- =====
-- L
-- =====

```

LimitedPowerIncrease ::= ENUMERATED {

```

    used,
    not-used
}

```

```
Local-Cell-ID ::= INTEGER (0..268435455)
```

```

-- =====
-- M
-- =====

```

```
MaximumDL-PowerCapability ::= INTEGER(0..500)
-- Unit dBm, Range 0dBm .. 50dBm, Step +0.1dB
```

```
MaximumTransmissionPower ::= INTEGER(0..500)
-- Unit dBm, Range 0dBm .. 50dBm, Step +0.1dB
```

```
MaxNrOfUL-DPDCHs ::= INTEGER (1..6)
```

```
Max-Number-of-PCPCHes ::= INTEGER (1..64,...)
```

```
MaxPRACH-MidambleShifts ::= ENUMERATED {
    shift4,
    shift8,
    ...
}
```

```
MeasurementFilterCoefficient ::= ENUMERATED {k0, k1, k2, k3, k4, k5, k6, k7, k8, k9, k11, k13, k15, k17, k19,...}
-- Measurement Filter Coefficient to be used for measurement
```

```
MeasurementID ::= INTEGER (0..1048575)
```

```

MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
    SEQUENCE {
        iE-ID ProtocolIE-ID,
        repetitionNumber RepetitionNumber1 OPTIONAL,
        iE-Extensions ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
        ...
    }

```

```

MessageStructure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
MidambleConfigurationBurstType1And3 ::= ENUMERATED {v4, v8, v16}
```

```
MidambleConfigurationBurstType2 ::= ENUMERATED {v3, v6}
```

```

MidambleShiftAndBurstType ::= CHOICE {
    type1 SEQUENCE {
        midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
        midambleAllocationMode CHOICE {
            defaultMidamble NULL,

```

```

        commonMidamble                NULL,
        ueSpecificMidamble            MidambleShiftLong,
        ...
    },
    ...
},
type2                                SEQUENCE {
    midambleConfigurationBurstType2  MidambleConfigurationBurstType2,
    midambleAllocationMode           CHOICE {
        defaultMidamble              NULL,
        commonMidamble               NULL,
        ueSpecificMidamble           MidambleShiftShort,
        ...
    },
    ...
},
type3                                SEQUENCE {
    midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
    midambleAllocationMode           CHOICE {
        defaultMidamble              NULL,
        ueSpecificMidamble           MidambleShiftLong,
        ...
    },
    ...
},
...
}

MidambleShiftLong ::=                INTEGER (0..15)

MidambleShiftShort ::=               INTEGER (0..5)

MidambleShiftLCR ::= SEQUENCE {
    midambleAllocationMode           MidambleAllocationMode,
    midambleShift                    MidambleShiftLong OPTIONAL,
    -- The IE shall be present if the Midamble Allocation Mode IE is set to "UE specific midamble".
    iE-Extensions                    ProtocolExtensionContainer { {MidambleShiftLCR-ExtIEs} } OPTIONAL,
    ...
}

MidambleAllocationMode ::= ENUMERATED {
    defaultMidamble,
    commonMidamble,
    ueSpecificMidamble,
    ...
}

MidambleShiftLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

MinimumDL-PowerCapability ::= INTEGER(0..800)
-- Unit dBm, Range -30dBm .. 50dBm, Step +0.1dB

```

```
MinSpreadingFactor ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256,
    v512
}

Modulation ::= ENUMERATED {
    qPSK,
    eightPSK,
    ...
}

MinUL-ChannelisationCodeLength ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256,
    ...
}

MultiplexingPosition ::= ENUMERATED {
    fixed,
    flexible
}

-- =====
-- N
-- =====

NCyclesPerSFNperiod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    ...
}

NEOT ::= INTEGER (0..8)

NFmax ::= INTEGER (1..64,...)

NRepetitionsPerCyclePeriod ::= INTEGER (2..10)

N-INSYNC-IND ::= INTEGER (1..256)
```

N-OUTSYNC-IND ::= INTEGER (1..256)

NeighbouringCellMeasurementInformation ::= SEQUENCE (SIZE (1..maxNrOfMeasNCell)) OF

```
CHOICE {
    neighbouringFDDCellMeasurementInformation      NeighbouringFDDCellMeasurementInformation, -- FDD only
    neighbouringTDDCellMeasurementInformation      NeighbouringTDDCellMeasurementInformation, -- 3.84Mcps TDD only
    -- Applicable to 3.84Mcps TDD only
    ...
}
```

NeighbouringFDDCellMeasurementInformation ::= SEQUENCE {

```
uC-Id          UC-Id,
uARFCN         UARFCN,
primaryScramblingCode PrimaryScramblingCode,
iE-Extensions  ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs } } OPTIONAL,
...
}
```

NeighbouringFDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```
...
}
```

NeighbouringTDDCellMeasurementInformation ::= SEQUENCE {

```
uC-Id          UC-Id,
uARFCN         UARFCN,
cellParameterID CellParameterID,
timeSlot       TimeSlot          OPTIONAL,
midambleShiftAndBurstType MidambleShiftAndBurstType  OPTIONAL,
iE-Extensions  ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem-ExtIEs } } OPTIONAL,
...
}
```

NeighbouringTDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```
...
}
```

NodeB-CommunicationContextID ::= INTEGER (0..1048575)

NStartMessage ::= INTEGER (1..8)

```
-- =====
-- O
-- =====
```

```
-- =====
-- P
-- =====
```

PagingIndicatorLength ::= ENUMERATED {

```
v2,
v4,
v8,
```

```

}
...
}

PayloadCRC-PresenceIndicator ::= ENUMERATED {
    cRC-Included,
    cRC-NotIncluded,
    ...
}

PCCPCH-Power ::= INTEGER (-150..400,...)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH shall be set to -150
-- If power >= 40 PCCPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB

PCP-Length ::= ENUMERATED{
    v0,
    v8
}

PDSCH-CodeMapping ::= SEQUENCE {
    dl-ScramblingCode          DL-ScramblingCode,
    signallingMethod          CHOICE {
        code-Range            PDSCH-CodeMapping-PDSCH-CodeMappingInformationList,
        tFCI-Range            PDSCH-CodeMapping-DSCH-MappingInformationList,
        explicit               PDSCH-CodeMapping-PDSCH-CodeInformationList,
        ...,
        replace                PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList
    },
    iE-Extensions              ProtocolExtensionContainer { { PDSCH-CodeMapping-ExtIEs } } OPTIONAL,
    ...
}

PDSCH-CodeMapping-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-CodeMapping-CodeNumberComp ::= INTEGER (0..maxCodeNrComp-1)

PDSCH-CodeMapping-SpreadingFactor ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256,
    ...
}

PDSCH-CodeMapping-PDSCH-CodeMappingInformationList ::= SEQUENCE (SIZE (1..maxNrOfCodeGroups)) OF
SEQUENCE {
    spreadingFactor            PDSCH-CodeMapping-SpreadingFactor,

```

```

multi-CodeInfo          PDSCH-Multi-CodeInfo,
start-CodeNumber        PDSCH-CodeMapping-CodeNumberComp,
stop-CodeNumber         PDSCH-CodeMapping-CodeNumberComp,
iE-Extensions           ProtocolExtensionContainer { { PDSCH-CodeMapping-PDSCH-CodeMappingInformationList-ExtIEs} } OPTIONAL,
...
}

PDSCH-CodeMapping-PDSCH-CodeMappingInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PDSCH-CodeMapping-DSCH-MappingInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCIGroups)) OF
SEQUENCE {
maxTFCI-field2-Value    PDSCH-CodeMapping-MaxTFCI-Field2-Value,
spreadingFactor         PDSCH-CodeMapping-SpreadingFactor,
multi-CodeInfo          PDSCH-Multi-CodeInfo,
codeNumber              PDSCH-CodeMapping-CodeNumberComp,
iE-Extensions           ProtocolExtensionContainer { { PDSCH-CodeMapping-DSCH-MappingInformationList-ExtIEs} } OPTIONAL,
...
}

PDSCH-CodeMapping-DSCH-MappingInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PDSCH-CodeMapping-MaxTFCI-Field2-Value ::= INTEGER (1..1023)

PDSCH-CodeMapping-PDSCH-CodeInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
SEQUENCE {
spreadingFactor         PDSCH-CodeMapping-SpreadingFactor,
multi-CodeInfo          PDSCH-Multi-CodeInfo,
codeNumber              PDSCH-CodeMapping-CodeNumberComp,
iE-Extensions           ProtocolExtensionContainer { { PDSCH-CodeMapping-PDSCH-CodeInformationList-ExtIEs} } OPTIONAL,
...
}

PDSCH-CodeMapping-PDSCH-CodeInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
SEQUENCE {
tfci-Field2            TFCS-MaxTFCI-field2-Value,
spreadingFactor        PDSCH-CodeMapping-SpreadingFactor,
multi-CodeInfo          PDSCH-Multi-CodeInfo,
codeNumber              PDSCH-CodeMapping-CodeNumberComp,
iE-Extensions           ProtocolExtensionContainer { { PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList-ExtIEs} } OPTIONAL,
...
}

PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```
PDSCH-Multi-CodeInfo ::= INTEGER (1..16)

PDSCH-ID ::= INTEGER (0..255)

PDSCHSet-ID ::= INTEGER (0..255)

PICH-Mode ::= ENUMERATED {
    v18,
    v36,
    v72,
    v144,
    ...
}

PICH-Power ::= INTEGER (-10..5)
-- Unit dB, Range -10dB .. +5dB, Step +1dB

PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
}

PowerOffset ::= INTEGER (0..24)
-- PowerOffset = offset * 0.25
-- Unit dB, Range 0dB .. +6dB, Step +0.25dB

PowerRaiseLimit ::= INTEGER (0..10)

PRACH-Midamble ::= ENUMERATED {
    inverted,
    direct,
    ...
}

PRC ::= INTEGER (-2047..2047)
--pseudo range correction; scaling factor 0.32 meters

PRCDeviation ::= ENUMERATED {
    one,
    two,
    five,
    ten,
    ...
}

PreambleSignatures ::= BIT STRING {
    signature15(0),
    signature14(1),
    signature13(2),
    signature12(3),
    signature11(4),
```



```
signature10(5),
signature9(6),
signature8(7),
signature7(8),
signature6(9),
signature5(10),
signature4(11),
signature3(12),
signature2(13),
signature1(14),
signature0(15)
} (SIZE (16))

PreambleThreshold ::= INTEGER (0..72)
-- 0= -36.0dB, 1= -35.5dB, ... , 72= 0.0dB

PredictedSFNSFNDeviationLimit ::=INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

PredictedTUTRANGPSDeviationLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

Pre-emptionCapability ::= ENUMERATED {
    shall-not-trigger-pre-emption,
    may-trigger-pre-emption
}

Pre-emptionVulnerability ::= ENUMERATED {
    not-pre-emptable,
    pre-emptable
}

PrimaryCPICH-Power ::= INTEGER(-100..500)
-- step 0.1 (Range -10.0..50.0) Unit is dBm

PrimaryScramblingCode ::= INTEGER (0..511)

PriorityLevel          ::= INTEGER (0..15)
-- 0 = spare, 1 = highest priority, ...14 = lowest priority and 15 = no priority

PropagationDelay ::= INTEGER (0..255)
-- Unit: chips, step size 3 chips
-- example: 0 = 0chip, 1 = 3chips

SCH-TimeSlot ::= INTEGER (0..6)

PunctureLimit ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100%

PUSCH-ID ::= INTEGER (0..255)

PUSCHSet-ID ::= INTEGER (0..255)
```

```
-- =====
-- Q
-- =====

QE-Selector ::= ENUMERATED {
    selected,
    non-selected
}

-- =====
-- R
-- =====

RACH-SlotFormat ::= ENUMERATED {
    v0,
    v1,
    v2,
    v3,
    ...
}

RACH-SubChannelNumbers ::= BIT STRING {
    subCh11(0),
    subCh10(1),
    subCh9(2),
    subCh8(3),
    subCh7(4),
    subCh6(5),
    subCh5(6),
    subCh4(7),
    subCh3(8),
    subCh2(9),
    subCh1(10),
    subCh0(11)
} (SIZE (12))

Range-Correction-Rate ::= INTEGER (-127..127)
-- scaling factor 0.032 m/s

ReferenceClockAvailability ::= ENUMERATED {
    available,
    notAvailable
}

ReferenceSFNoffset ::= INTEGER (0..255)

RepetitionLength ::= INTEGER (1..63)

RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
```

```

    v16,
    v32,
    v64,
    ...
}

RepetitionNumber0 ::= INTEGER (0..255)

RepetitionNumber1 ::= INTEGER (1..256)

RefTFCNumber ::= INTEGER (0..3)

ReportCharacteristics ::= CHOICE {
    onDemand          NULL,
    periodic          ReportCharacteristicsType-ReportPeriodicity,
    event-a           ReportCharacteristicsType-EventA,
    event-b           ReportCharacteristicsType-EventB,
    event-c           ReportCharacteristicsType-EventC,
    event-d           ReportCharacteristicsType-EventD,
    event-e           ReportCharacteristicsType-EventE,
    event-f           ReportCharacteristicsType-EventF,
    ...,
    extension-ReportCharacteristics  Extension-ReportCharacteristics
}

Extension-ReportCharacteristics ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsIE }}

Extension-ReportCharacteristicsIE NBAP-PROTOCOL-IES ::= {
    { ID id-ReportCharacteristicsType-OnModification  CRITICALITY reject  TYPE ReportCharacteristicsType-OnModification  PRESENCE mandatory }
}

ReportCharacteristicsType-EventA ::= SEQUENCE {
    measurementThreshold          ReportCharacteristicsType-MeasurementThreshold,
    measurementHysteresisTime    ReportCharacteristicsType-ScaledMeasurementHysteresisTime          OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { ReportCharacteristicsType-EventA-ExtIEs } }  OPTIONAL,
    ...
}

ReportCharacteristicsType-EventA-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-EventB ::= SEQUENCE {
    measurementThreshold          ReportCharacteristicsType-MeasurementThreshold,
    measurementHysteresisTime    ReportCharacteristicsType-ScaledMeasurementHysteresisTime          OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { ReportCharacteristicsType-EventB-ExtIEs } }  OPTIONAL,
    ...
}

ReportCharacteristicsType-EventB-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

ReportCharacteristicsType-EventC ::= SEQUENCE {
    measurementIncreaseThreshold    ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime          ReportCharacteristicsType-ScaledMeasurementChangeTime,
    iE-Extensions                  ProtocolExtensionContainer { { ReportCharacteristicsType-EventC-ExtIEs} }    OPTIONAL,
    ...
}

ReportCharacteristicsType-EventC-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-EventD ::= SEQUENCE {
    measurementDecreaseThreshold    ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime          ReportCharacteristicsType-ScaledMeasurementChangeTime,
    iE-Extensions                  ProtocolExtensionContainer { { ReportCharacteristicsType-EventD-ExtIEs} }    OPTIONAL,
    ...
}

ReportCharacteristicsType-EventD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-EventE ::= SEQUENCE {
    measurementThreshold1          ReportCharacteristicsType-MeasurementThreshold,
    measurementThreshold2          ReportCharacteristicsType-MeasurementThreshold                OPTIONAL,
    measurementHysteresisTime      ReportCharacteristicsType-ScaledMeasurementHysteresisTime    OPTIONAL,
    reportPeriodicity              ReportCharacteristicsType-ReportPeriodicity                OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { ReportCharacteristicsType-EventE-ExtIEs} }    OPTIONAL,
    ...
}

ReportCharacteristicsType-EventE-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-EventF ::= SEQUENCE {
    measurementThreshold1          ReportCharacteristicsType-MeasurementThreshold,
    measurementThreshold2          ReportCharacteristicsType-MeasurementThreshold                OPTIONAL,
    measurementHysteresisTime      ReportCharacteristicsType-ScaledMeasurementHysteresisTime    OPTIONAL,
    reportPeriodicity              ReportCharacteristicsType-ReportPeriodicity                OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { ReportCharacteristicsType-EventF-ExtIEs} }    OPTIONAL,
    ...
}

ReportCharacteristicsType-EventF-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-OnModification ::= SEQUENCE {
    measurementThreshold          ReportCharacteristicsType-MeasurementThreshold,
    iE-Extensions                  ProtocolExtensionContainer { { ReportCharacteristicsType-OnModification-ExtIEs} }    OPTIONAL,
    ...
}

```

```

ReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold ::= CHOICE {
    received-total-wide-band-power          Received-total-wide-band-power-Value-IncrDecrThres,
    transmitted-carrier-power               Transmitted-Carrier-Power-Value,
    acknowledged-prach-preambles           Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP                         UL-TimeslotISCP-Value-IncrDecrThres,
    sir                                      SIR-Value-IncrDecrThres,
    sir-error                               SIR-Error-Value-IncrDecrThres,
    transmitted-code-power                 Transmitted-Code-Power-Value-IncrDecrThres,
    rscp                                    RSCP-Value-IncrDecrThres,
    round-trip-time                        Round-Trip-Time-IncrDecrThres,
    acknowledged-PCPCH-access-preambles    Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles        Detected-PCPCH-access-preambles,
    ...
}

ReportCharacteristicsType-MeasurementThreshold ::= CHOICE {
    received-total-wide-band-power          Received-total-wide-band-power-Value,
    transmitted-carrier-power               Transmitted-Carrier-Power-Value,
    acknowledged-prach-preambles           Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP                         UL-TimeslotISCP-Value,
    sir                                      SIR-Value,
    sir-error                               SIR-Error-Value,
    transmitted-code-power                 Transmitted-Code-Power-Value,
    rscp                                    RSCP-Value,
    rx-timing-deviation                    Rx-Timing-Deviation-Value,
    round-trip-time                        Round-Trip-Time-Value,
    acknowledged-PCPCH-access-preambles    Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles        Detected-PCPCH-access-preambles,
    ...,
    extension-ReportCharacteristicsType-MeasurementThreshold      Extension-ReportCharacteristicsType-MeasurementThreshold
}

Extension-ReportCharacteristicsType-MeasurementThreshold ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsType-
MeasurementThresholdIE }}

Extension-ReportCharacteristicsType-MeasurementThresholdIE NBAP-PROTOCOL-IES ::= {
    { ID id-TUTRANGPSMeasurementThresholdInformation    CRITICALITY reject TYPE TUTRANGPSMeasurementThresholdInformation    PRESENCE mandatory } |
    { ID id-SFNFSNMeasurementThresholdInformation      CRITICALITY reject TYPE SFNFSNMeasurementThresholdInformation    PRESENCE mandatory }
}

ReportCharacteristicsType-ScaledMeasurementChangeTime ::= CHOICE {
    msec          MeasurementChangeTime-Scaledmsec,
    ...
}

MeasurementChangeTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementChangeTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms

```

```
ReportCharacteristicsType-ScaledMeasurementHysteresisTime ::= CHOICE {
    msec          MeasurementHysteresisTime-Scaledmsec,
    ...
}
```

```
MeasurementHysteresisTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementHysteresisTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms
```

```
ReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
    msec          ReportPeriodicity-Scaledmsec,
    min          ReportPeriodicity-Scaledmin,
    ...
}
```

```
ReportPeriodicity-Scaledmsec ::= INTEGER (1..6000,...)
-- ReportPeriodicity-msec = ReportPeriodicity * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms
```

```
ReportPeriodicity-Scaledmin ::= INTEGER (1..60,...)
-- Unit min, Range 1min .. 60min(hour), Step 1min
```

```
ReportPeriodicity-Scaledhour ::= INTEGER (1..24,...)
-- Unit hour, Range 1hour .. 24hours(day), Step 1hour
```

```
ResourceOperationalState ::= ENUMERATED {
    enabled,
    disabled
}
```

```
CommonTransportChannel-InformationResponse ::= SEQUENCE {
    commonTransportChannelID CommonTransportChannelID,
    bindingID BindingID OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
    iE-Extensions ProtocolExtensionContainer ( { CommonTransportChannel-InformationResponse-ExtIEs } ) OPTIONAL,
    ...
}
```

```
CommonTransportChannel-InformationResponse-ExtIEs-NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
LimitedPowerIncrease ::= ENUMERATED {
    used,
    not-used
}
```

```
RL-ID ::= INTEGER (0..31)
```

```
RL-Set-ID ::= INTEGER (0..31)
```

```
Round-Trip-Time-IncrDecrThres ::= INTEGER(0..32766)
```

```

RNC-ID ::= INTEGER (0..4095)

Round-Trip-Time-Value ::= INTEGER(0..32767)
-- According to mapping in [22]

RSCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]

RSCP-Value-IncrDecrThres ::= INTEGER (0..126)

Received-total-wide-band-power-Value ::= INTEGER(0..621)
-- According to mapping in [22]/[23]

Received-total-wide-band-power-Value-IncrDecrThres ::= INTEGER (0..620)

RequestedDataValueInformation ::= CHOICE {
    informationAvailable      InformationAvailable,
    informationnotAvailable   InformationnotAvailable
}

InformationAvailable ::= SEQUENCE {
    requesteddataValue      RequestedDataValue,
    ie-Extensions           ProtocolExtensionContainer { { InformationAvailableItem-ExtIEs} }
    ...
}
OPTIONAL,

InformationAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

InformationnotAvailable ::= NULL

RequestedDataValue ::= SEQUENCE {
    dgps-corrections      DGPSCorrections OPTIONAL,
    gps-navandrecovery    GPS-NavigationModel-and-TimeRecovery OPTIONAL,
    gps-ionos-model       GPS-Ionospheric-Model OPTIONAL,
    gps-utc-model         GPS-UTC-Model OPTIONAL,
    gps-almanac           GPS-Almanac OPTIONAL,
    gps-rt-integrity      GPS-RealTime-Integrity OPTIONAL,
    gpsrxpos              GPS-RX-POS OPTIONAL,
    ...
}

Rx-Timing-Deviation-Value ::= INTEGER (0..8191)
-- According to mapping in [23]

Rx-Timing-Deviation-Value-LCR ::= INTEGER (0..255)
-- According to mapping in [23]

-- =====
-- S
-- =====

```

```

AdjustmentPeriod ::= INTEGER(1..256)
-- Unit Frame

SAT-ID ::= INTEGER (0..63)

SAT-Info-Almanac ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-Almanac-Item

SAT-Info-Almanac-Item ::= SEQUENCE {
    data-id          DATA-ID,
    sat-id           SAT-ID,
    gps-e-alm        BIT STRING (SIZE (16)),
    gps-toa-alm      BIT STRING (SIZE (8)),
    gps-delta-I-alm  BIT STRING (SIZE (16)),
    omegadot-alm     BIT STRING (SIZE (16)),
    svhealth-alm     BIT STRING (SIZE (8)),
    gps-a-sqrt-alm   BIT STRING (SIZE (24)),
    omegazero-alm    BIT STRING (SIZE (24)),
    m-zero-alm       BIT STRING (SIZE (24)),
    gps-omega-alm    BIT STRING (SIZE (24)),
    gps-af-zero-alm  BIT STRING (SIZE (11)),
    gps-af-one-alm   BIT STRING (SIZE (11)),
    ie-Extensions    ProtocolExtensionContainer { { SAT-Info-Almanac-Item-ExtIEs} } OPTIONAL,
    ...
}

SAT-Info-Almanac-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SAT-Info-DGPSCorrections ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-DGPSCorrections-Item

SAT-Info-DGPSCorrections-Item ::= SEQUENCE {
    sat-id           SAT-ID,
    iode-dgps        BIT STRING (SIZE (8)),
    udre             UDRE,
    prc              PRC,
    range-correction-rate Range-Correction-Rate,
    ie-Extensions    ProtocolExtensionContainer { { SAT-Info-DGPSCorrections-Item-ExtIEs} } OPTIONAL,
    ...
}

SAT-Info-DGPSCorrections-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SATInfo-RealTime-Integrity ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-RealTime-Integrity-Item

SAT-Info-RealTime-Integrity-Item ::= SEQUENCE {
    bad-sat-id       SAT-ID,
    ie-Extensions    ProtocolExtensionContainer { { SAT-Info-RealTime-Integrity-Item-ExtIEs} } OPTIONAL,
    ...
}

```



```

SAT-Info-RealTime-Integrity-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ScaledAdjustmentRatio ::= INTEGER(0..100)
-- AdjustmentRatio = ScaledAdjustmentRatio / 100

MaxAdjustmentStep ::= INTEGER(1..10)
-- Unit Slot

ScramblingCodeNumber ::= INTEGER (0..15)

SecondaryCCPCH-SlotFormat ::= INTEGER(0..17,...)

Segment-Type ::= ENUMERATED {
    first-segment,
    first-segment-short,
    subsequent-segment,
    last-segment,
    last-segment-short,
    complete-SIB,
    complete-SIB-short,
    ...
}

S-FieldLength ::= ENUMERATED {
    v1,
    v2,
    ...
}

SFN ::= INTEGER (0..4095)

SFNSFN-FDD ::= INTEGER (0..614399)

SFNSFN-TDD ::= INTEGER (0..40961)

SFNSFNChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

SFNSFNDriftRate ::= INTEGER (-100..100)
-- Unit chip/s, Step 1/256 chip/s, Range -100/256..+100/256 chip/s

SFNSFNDriftRateQuality ::= INTEGER (0..100)
-- Unit chip/s, Step 1/256 chip/s, Range 0..100/256 chip/s

SFNSFNMeasurementThresholdInformation ::= SEQUENCE {
    sFNSFNChangeLimit SFNSFNChangeLimit OPTIONAL,
    predictedSFNSFNDeviationLimit PredictedSFNSFNDeviationLimit OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { SFNSFNMeasurementThresholdInformation-ExtIEs } } OPTIONAL,
    ...
}

```

```

SFNSFNMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNMeasurementValueInformation ::= SEQUENCE {
    successfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
        SEQUENCE {
            uC-Id UC-Id,
            SFNSFNValue SFNSFNValue,
            SFNSFNQuality SFNSFNQuality OPTIONAL,
            SFNSFNDriftRate SFNSFNDriftRate,
            SFNSFNDriftRateQuality SFNSFNDriftRateQuality,
            SFNSFNTimeStampInformation SFNSFNTimeStampInformation,
            iE-Extensions ProtocolExtensionContainer { { SuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs} } OPTIONAL,
            ...
        },
    unsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
        SEQUENCE {
            uC-Id UC-Id,
            iE-Extensions ProtocolExtensionContainer { { UnsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs} } OPTIONAL,
            ...
        },
    iE-Extensions ProtocolExtensionContainer { { SFNSFNMeasurementValueInformationItem-ExtIEs} } OPTIONAL,
    ...
}

SFNSFNMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UnsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip

ShutdownTimer ::= INTEGER (1..3600)
-- Unit sec

SIB-Originator ::= ENUMERATED {
    nodeB,
    cRNC,
    ...
}

```

SIR-Error-Value ::= INTEGER (0..125)

-- According to mapping in [22]

SFNSFNTimeStampInformation ::= CHOICE {

 sFNSFNTimeStamp-FDD SFN,
 sFNSFNTimeStamp-TDD SFNSFNTimeStamp-TDD,
 ...}

SFNSFNTimeStamp-TDD ::= SEQUENCE {

 sFN SFN,
 timeSlot TimeSlot,
 iE-Extensions ProtocolExtensionContainer { { SFNSFNTimeStamp-ExtIEs} }
 ...}

OPTIONAL,

SFNSFNTimeStamp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

 ...}

SFNSFNValue ::= CHOICE {

 sFNSFN-FDD SFNSFN-FDD,
 sFNSFN-TDD SFNSFN-TDD,
 ...}

SIR-Error-Value-IncrDecrThres ::= INTEGER (0..124)

SIR-Value ::= INTEGER (0..63)

-- According to mapping in [22]/[23]

SIR-Value-IncrDecrThres ::= INTEGER (0..62)

SpecialBurstScheduling ::= INTEGER (1..256)

SSDT-Cell-Identity ::= ENUMERATED {a, b, c, d, e, f, g, h}

SSDT-CellID-Length ::= ENUMERATED {

 short,
 medium,
 long}

SSDT-Indication ::= ENUMERATED {

 ssdt-active-in-the-UE,
 ssdt-not-active-in-the-UE}

Start-Of-Audit-Sequence-Indicator ::= ENUMERATED {

 start-of-audit-sequence,
 not-start-of-audit-sequence}

STTD-Indicator ::= ENUMERATED {

```

    active,
    inactive,
    ...
}

SSDT-SupportIndicator ::= ENUMERATED {
    sSDT-Supported,
    sSDT-not-supported
}

SyncCase ::= INTEGER (1..2,...)

SYNCDLCodeId ::= INTEGER (1..32,...)

SyncFrameNumber ::= INTEGER (1..10)

SynchronisationReportCharacteristics ::= SEQUENCE {
    synchronisationReportCharacteristicsType SynchronisationReportCharacteristicsType,
    synchronisationReportCharactThreExc SynchronisationReportCharactThreExc OPTIONAL,
    -- This IE shall be included if the synchronisationReportCharacteristicsType IE is set to "thresholdExceeding".
    iE-Extensions ProtocolExtensionContainer { { SynchronisationReportCharacteristics-ExtIEs } } OPTIONAL,
    ...
}

SynchronisationReportCharacteristics-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SynchronisationReportCharactThreExc ::= SEQUENCE (SIZE (1..maxNrOfCellSyncBursts)) OF SynchronisationReportCharactThreInfoItem

SynchronisationReportCharactThreInfoItem ::= SEQUENCE {
    syncFrameNumber SyncFrameNumber,
    cellSyncBurstInformation SEQUENCE (SIZE (1.. maxNrOfReceptsPerSyncFrame)) OF SynchronisationReportCharactCellSyncBurstInfoItem,
    iE-Extensions ProtocolExtensionContainer { { SynchronisationReportCharactThreInfoItem-ExtIEs } } OPTIONAL,
    ...
}

SynchronisationReportCharactThreInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SynchronisationReportCharactCellSyncBurstInfoItem ::= SEQUENCE {
    cellSyncBurstCode CellSyncBurstCode,
    cellSyncBurstCodeShift CellSyncBurstCodeShift,
    cellSyncBurstTiming CellSyncBurstTiming OPTIONAL,
    cellSyncBurstTimingThreshold CellSyncBurstTimingThreshold OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs } } OPTIONAL,
    ...
}

SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
SynchronisationReportCharacteristicsType ::= ENUMERATED {
    frameRelated,
    sFNperiodRelated,
    cycleLengthRelated,
    thresholdExceeding,
    frequencyAcquisitionCompleted,
    ...
}
```

```
SynchronisationReportType ::= ENUMERATED {
    initialPhase,
    steadyStatePhase,
    lateEntrantCell,
    frequencyAcquisition,
    ...
}
```

```
-- =====
-- T
-- =====
```

```
T-Cell ::= ENUMERATED {
    v0,
    v1,
    v2,
    v3,
    v4,
    v5,
    v6,
    v7,
    v8,
    v9
}
```

```
T-RLFFAILURE ::= INTEGER (0..255)
-- Unit seconds, Range 0s .. 25.5s, Step 0.1s
```

```
TDD-ChannelisationCode ::= ENUMERATED {
    chCode1div1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
    chCode4div4,
    chCode8div1,
    chCode8div2,
    chCode8div3,
    chCode8div4,
    chCode8div5,
    chCode8div6,
    chCode8div7,
}
```

```

    chCode8div8,
    chCode16div1,
    chCode16div2,
    chCode16div3,
    chCode16div4,
    chCode16div5,
    chCode16div6,
    chCode16div7,
    chCode16div8,
    chCode16div9,
    chCode16div10,
    chCode16div11,
    chCode16div12,
    chCode16div13,
    chCode16div14,
    chCode16div15,
    chCode16div16,
    ...
}

TDD-ChannelisationCodeLCR ::= SEQUENCE {
    tdd-ChannelisationCode          TDD-ChannelisationCode,
    modulation                      Modulation, -- Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD
    ...
}

TDD-DL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem

TDD-DL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID                        DPCH-ID,
    tdd-ChannelisationCode          TDD-ChannelisationCode,
    iE-Extensions                   ProtocolExtensionContainer { { TDD-DL-Code-InformationItem-ExtIEs } }    OPTIONAL,
    ...
}

TDD-DL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-DL-Code-LCR-InformationItem

TDD-DL-Code-LCR-InformationItem ::= SEQUENCE {
    dPCH-ID                        DPCH-ID,
    tdd-ChannelisationCodeLCR       TDD-ChannelisationCodeLCR,
    iE-Extensions                   ProtocolExtensionContainer { { TDD-DL-Code-LCR-InformationItem-ExtIEs } }    OPTIONAL,
    ...
}

TDD-DL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DPCHoffset ::= CHOICE {

```

```

    initialOffset      INTEGER (0..255),
    noinitialOffset    INTEGER (0..63)
}

TDD-PhysicalChannelOffset ::= INTEGER (0..63)

TDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size1,
    step-size2,
    step-size3,
    ...
}

TransportFormatCombination-Beta ::= CHOICE {
    signalledGainFactors SEQUENCE {
        gainFactor CHOICE {
            fdd SEQUENCE {
                betaC BetaCD,
                betaD BetaCD,
                iE-Extensions ProtocolExtensionContainer { { GainFactorFDD-ExtIEs } } OPTIONAL,
                ...
            },
            tdd BetaCD,
            ...
        },
        refTFCNumber RefTFCNumber OPTIONAL,
        iE-Extensions ProtocolExtensionContainer { { SignalledGainFactors-ExtIEs } } OPTIONAL,
        ...
    },
    computedGainFactors RefTFCNumber,
    ...
}

GainFactorFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SignalledGainFactors-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-UL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationItem

TDD-UL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID DPCH-ID,
    tdd-ChannelisationCode TDD-ChannelisationCode,
    iE-Extensions ProtocolExtensionContainer { { TDD-UL-Code-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

TDD-UL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

TDD-UL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-UL-Code-LCR-InformationItem

```
TDD-UL-Code-LCR-InformationItem ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    iE-Extensions          ProtocolExtensionContainer { { TDD-UL-Code-LCR-InformationItem-ExtIEs } } OPTIONAL,
    ...
}
```

```
TDD-UL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
TFCI-Coding ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    ...
}
```

```
TFCI-Presence ::= ENUMERATED {
    present,
    not-present
}
```

```
TFCI-SignallingMode ::= SEQUENCE {
    tFCI-SignallingOption TFCI-SignallingMode-TFCI-SignallingOption,
    splitType             TFCI-SignallingMode-SplitType OPTIONAL,
    -- This IE shall be present if the TFCI signalling option is split --
    lengthOfTFCI2        TFCI-SignallingMode-LengthOfTFCI2 OPTIONAL,
    -- This IE shall be present if the split type is logical --
    iE-Extensions        ProtocolExtensionContainer { { TFCI-SignallingMode-ExtIEs } } OPTIONAL,
    ...
}
```

```
TFCI-SignallingMode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

TFCI-SignallingMode-LengthOfTFCI2 ::= INTEGER (1..10)

```
TFCI-SignallingMode-SplitType ::= ENUMERATED {
    hard,
    logical
}
```

```
TFCI-SignallingMode-TFCI-SignallingOption ::= ENUMERATED {
    normal,
    split
}
```



```

TFCI2-BearerInformationResponse ::= SEQUENCE {
    bindingID
    transportLayerAddress
    iE-Extensions
    ...
}

TFCI2-BearerInformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TGD ::= INTEGER (0|15..269)
-- 0 = Undefined, only one transmission gap in the transmission gap pattern sequence

TGPRC ::= INTEGER (0..511)
-- 0 = infinity

TGPSID ::= INTEGER (1.. maxTGPS)

TGSN ::= INTEGER (0..14)

TimeSlot ::= INTEGER (0..14)

TimeSlotDirection ::= ENUMERATED {
    ul,
    dl,
    ...
}

TimeSlotLCR ::= INTEGER (0..6)

TimeSlotStatus ::= ENUMERATED {
    active,
    not-active,
    ...
}

TimingAdjustmentValue ::= CHOICE {
    initialPhase INTEGER (0..255),
    steadyStatePhase INTEGER (0..1048575)
}

TimingAdvanceApplied ::= ENUMERATED {
    yes,
    no
}
-- For 1.28Mcps TDD TimingAdvanceApplied = No

ToAWE ::= INTEGER (0..2559)
-- Unit ms

ToAWS ::= INTEGER (0..1279)
-- Unit ms

```

```

Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
SEQUENCE {
    tGPSID          TGPSID,
    tGSN            TGSN,
    tGL1            GapLength,
    tGL2            GapLength OPTIONAL,
    tGD             TGD,
    tGPL1           GapDuration,
    tGPL2           GapDuration OPTIONAL,
    uL-DL-mode      UL-DL-mode,
    downlink-Compressed-Mode-Method Downlink-Compressed-Mode-Method OPTIONAL,
    -- This IE shall be present if the UL/DL mode IE is set to "DL only" or "UL/DL"
    uplink-Compressed-Mode-Method Uplink-Compressed-Mode-Method OPTIONAL,
    -- This IE shall be present if the UL/DL mode IE is set to "UL only" or "UL/DL"
    dL-FrameType    DL-FrameType,
    delta-SIR1      DeltaSIR,
    delta-SIR-after1 DeltaSIR,
    delta-SIR2      DeltaSIR OPTIONAL,
    delta-SIR-after2 DeltaSIR OPTIONAL,
    iE-Extensions   ProtocolExtensionContainer { {Transmission-Gap-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
    ...
}

```

```

Transmission-Gap-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

TransmissionGapPatternSequenceCodeInformation ::= ENUMERATED{
    code-change,
    nocode-change
}

```

```

Transmitted-Carrier-Power-Value ::= INTEGER(0..100)
-- According to mapping in [422]/[523]

```

```

Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in [422]/[523]

```

```

Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)

```

```

TransmissionDiversityApplied ::= BOOLEAN
-- true: applied, false: not applied

```

```

TransmitDiversityIndicator ::= ENUMERATED {
    active,
    inactive
}

```

```

TFCS ::= SEQUENCE {
    tFCSvalues CHOICE {
        no-Split-in-TFCS TFCS-TFCSList,
        split-in-TFCS SEQUENCE {

```

```

        transportFormatCombination-DCH      TFCS-DCHList,
        signallingMethod                   CHOICE {
            tFCI-Range                       TFCS-MappingOnDSCHList,
            explicit                          TFCS-DSCHList,
            ...
        },
        iE-Extensions                       ProtocolExtensionContainer { { Split-in-TFCI-ExtIEs } }
        ...
    },
    ...
},
iE-Extensions      ProtocolExtensionContainer { { TFCS-ExtIEs } }      OPTIONAL,
...
}

Split-in-TFCI-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCSs)) OF
    SEQUENCE {
        cTFC                TFCS-CTFC,
        tFC-Beta             TransportFormatCombination-Beta      OPTIONAL,
        -- The IE shall be present if the TFCS concerns a UL DPCH or PRACH channel [FDD - or PCPCH channel].
        iE-Extensions        ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs } }      OPTIONAL,
        ...
    }

TFCS-TFCSList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-CTFC ::= CHOICE {
    ctfc2bit                INTEGER (0..3),
    ctfc4bit                INTEGER (0..15),
    ctfc6bit                INTEGER (0..63),
    ctfc8bit                INTEGER (0..255),
    ctfc12bit               INTEGER (0..4095),
    ctfc16bit               INTEGER (0..65535),
    ctfcmaxbit              INTEGER (0..maxCTFC)
}

TFCS-DCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI1Combs)) OF
    SEQUENCE {
        cTFC                TFCS-CTFC,
        iE-Extensions        ProtocolExtensionContainer { { TFCS-DCHList-ExtIEs } }      OPTIONAL,
        ...
    }
}

```

```

TFCS-DCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-MappingOnDSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCIGroups)) OF
    SEQUENCE {
        maxTFCI-field2-Value      TFCS-MaxTFCI-field2-Value,
        cTFC-DSCH                 TFCS-CTFC,
        iE-Extensions             ProtocolExtensionContainer { { TFCS-MappingOnDSCHList-ExtIEs } }
        ...
    }

TFCS-MappingOnDSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-MaxTFCI-field2-Value ::= INTEGER (1..maxNrOfTFCI2Combs-1)

TFCS-DSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
    SEQUENCE {
        cTFC-DSCH                 TFCS-CTFC,
        iE-Extensions             ProtocolExtensionContainer { { TFCS-DSCHList-ExtIEs } }
        ...
    }

TFCS-DSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportBearerRequestIndicator ::= ENUMERATED {
    bearerRequested,
    bearerNotRequested,
    ...
}

TransportFormatSet ::= SEQUENCE {
    dynamicParts                 TransportFormatSet-DynamicPartList,
    semi-staticPart              TransportFormatSet-Semi-staticPart,
    iE-Extensions                ProtocolExtensionContainer { { TransportFormatSet-ExtIEs } }
    ...
}

TransportFormatSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
    SEQUENCE {
        nrOfTransportBlocks       TransportFormatSet-NrOfTransportBlocks,
        transportBlockSize        TransportFormatSet-TransportBlockSize OPTIONAL,
        -- This IE shall be present if the Number of Transport Blocks IE is set to a value greater than 0
        mode                       TransportFormatSet-ModeDP,
        iE-Extensions             ProtocolExtensionContainer { { TransportFormatSet-DynamicPartList-ExtIEs } }
    }

```

```

    }
    ...
}

TransportFormatSet-DynamicPartList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-TransportFormatSet-ModeDP ::= SEQUENCE {
    transmissionTimeIntervalInformation      TransmissionTimeIntervalInformation      OPTIONAL,
    -- This IE shall be present if the Transmission Time Interval IE in the Semi-static Transport Format Information IE is set to "dynamic"
    iE-Extensions                          ProtocolExtensionContainer { {TDD-TransportFormatSet-ModeDP-ExtIEs} } OPTIONAL,
    ...
}

TDD-TransportFormatSet-ModeDP-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-count)) OF
    SEQUENCE {
        transmissionTimeInterval      TransportFormatSet-TransmissionTimeIntervalDynamic,
        iE-Extensions                 ProtocolExtensionContainer { { TransmissionTimeIntervalInformation-ExtIEs } }      OPTIONAL,
        ...
    }

TransmissionTimeIntervalInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-Semi-staticPart ::= SEQUENCE {
    transmissionTimeInterval      TransportFormatSet-TransmissionTimeIntervalSemiStatic,
    channelCoding                 TransportFormatSet-ChannelCodingType,
    codingRate                    TransportFormatSet-CodingRate      OPTIONAL,
    -- This IE shall be present if the Type of channel coding IE is set to 'convolutional' or 'turbo'
    rateMatchingAttribute         TransportFormatSet-RateMatchingAttribute,
    cRC-Size                      TransportFormatSet-CRC-Size,
    mode                          TransportFormatSet-ModeSSP,
    iE-Extensions                 ProtocolExtensionContainer { { TransportFormatSet-Semi-staticPart-ExtIEs } }      OPTIONAL,
    ...
}

TransportFormatSet-Semi-staticPart-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-ChannelCodingType ::= ENUMERATED {
    no-codingTDD,
    convolutional-coding,
    turbo-coding,
    ...
}

TransportFormatSet-CodingRate ::= ENUMERATED {

```

```
    half,  
    third,  
    ...  
}  
  
TransportFormatSet-CRC-Size ::= ENUMERATED {  
    v0,  
    v8,  
    v12,  
    v16,  
    v24,  
    ...  
}  
  
TransportFormatSet-ModeDP ::= CHOICE {  
    tdd                TDD-TransportFormatSet-ModeDP,  
    notApplicable     NULL,  
    ...  
}  
  
TransportFormatSet-ModeSSP ::= CHOICE {  
    tdd                TransportFormatSet-SecondInterleavingMode,  
    notApplicable     NULL,  
    ...  
}  
  
TransportFormatSet-NrOfTransportBlocks ::= INTEGER (0..512)  
  
TransportFormatSet-RateMatchingAttribute ::= INTEGER (1..maxRateMatching)  
  
TransportFormatSet-SecondInterleavingMode ::= ENUMERATED {  
    frame-related,  
    timeSlot-related,  
    ...  
}  
  
TransportFormatSet-TransmissionTimeIntervalDynamic ::= ENUMERATED {  
    msec-10,  
    msec-20,  
    msec-40,  
    msec-80,  
    ...  
}  
  
TransportFormatSet-TransmissionTimeIntervalSemiStatic ::= ENUMERATED {  
    msec-10,  
    msec-20,  
    msec-40,  
    msec-80,  
    dynamic,  
    ...,  
    msec-5  
}
```

```

TransportFormatSet-TransportBlockSize ::= INTEGER (0..5000)

TransportLayerAddress ::= BIT STRING (SIZE (1..160, ...))

TSTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

TUTRANGPS ::= SEQUENCE {
    ms-part    INTEGER (0..16383),
    ls-part    INTEGER (0..4294967295)
}

TUTRANGPSChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

TUTRANGPSDriftRate ::= INTEGER (-50..50)
-- Unit chip/s, Step 1/256 chip/s, Range -50/256..+50/256 chip/s

TUTRANGPSDriftRateQuality ::= INTEGER (0..50)
-- Unit chip/s, Step 1/256 chip/s, Range 0..50/256 chip/s

TUTRANGPSAccuracyClass ::= ENUMERATED {
    accuracy-class-A,
    accuracy-class-B,
    accuracy-class-C,
    ...
}

TUTRANGPSMeasurementThresholdInformation ::= SEQUENCE {
    tUTRANGPSChangeLimit          TUTRANGPSChangeLimit          OPTIONAL,
    predictedTUTRANGPSDeviationLimit PredictedTUTRANGPSDeviationLimit OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { TUTRANGPSMeasurementThresholdInformation-ExtIEs} } OPTIONAL,
    ...
}

TUTRANGPSMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TUTRANGPSMeasurementValueInformation ::= SEQUENCE {
    tUTRANGPS          TUTRANGPS,
    tUTRANGPSQuality   TUTRANGPSQuality,
    tUTRANGPSDriftRate TUTRANGPSDriftRate,
    tUTRANGPSDriftRateQuality TUTRANGPSDriftRateQuality,
    iE-Extensions     ProtocolExtensionContainer { {TUTRANGPSMeasurementValueInformationItem-ExtIEs} } OPTIONAL,
    ...
}

TUTRANGPSMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

TUTRANGPSQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip

TypeOfError ::= ENUMERATED {
    not-understood,
    missing,
    ...
}

-- =====
-- U
-- =====

UARFCN ::= INTEGER (0..16383, ...)
-- corresponds to 1885.2MHz .. 2024.8MHz

UC-Id ::= SEQUENCE {
    rNC-ID          RNC-ID,
    c-ID            C-ID,
    iE-Extensions  ProtocolExtensionContainer { {UC-Id-ExtIEs} } OPTIONAL,
    ...
}
UC-Id-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UDRE ::= ENUMERATED {
    udre-minusequal-one-m,
    udre-betweenoneandfour-m,
    udre-betweenfourandeight-m,
    udre-greaterequaleight-m
}

UL-CapacityCredit ::= INTEGER (0..65535)

UL-DL-mode ::= ENUMERATED {
    ul-only,
    dl-only,
    both-ul-and-dl
}

Uplink-Compressed-Mode-Method ::= ENUMERATED {
    sFdiv2,
    higher-layer-scheduling,
    ...
}

UL-Timeslot-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationItem

UL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot          TimeSlot,

```



```

midambleShiftAndBurstType      MidambleShiftAndBurstType,
tFCI-Presence                   TFCI-Presence,
uL-Code-InformationList         TDD-UL-Code-Information,
iE-Extensions                   ProtocolExtensionContainer { { UL-Timeslot-InformationItem-ExtIEs } }   OPTIONAL,
...
}

UL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-TimeslotLCR-InformationItem

UL-TimeslotLCR-InformationItem ::= SEQUENCE {
timeSlotLCR                     TimeSlotLCR,
midambleShiftLCR                MidambleShiftLCR,
tFCI-Presence                   TFCI-Presence,
uL-Code-InformationList         TDD-UL-Code-LCR-Information,
iE-Extensions                   ProtocolExtensionContainer { { UL-TimeslotLCR-InformationItem-ExtIEs } }   OPTIONAL,
...
}

UL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-DPCCH-SlotFormat ::= INTEGER (0..5,...)

UL-SIR ::= INTEGER (-82..173)
-- According to mapping in [16]

UL-FP-Mode ::= ENUMERATED {
normal,
silent,
...
}

UL-PhysCH-SF-Variation ::= ENUMERATED {
sf-variation-supported,
sf-variation-not-supported
}

UL-ScramblingCode ::= SEQUENCE {
uL-ScramblingCodeNumber         UL-ScramblingCodeNumber,
uL-ScramblingCodeLength        UL-ScramblingCodeLength,
iE-Extensions                   ProtocolExtensionContainer { { UL-ScramblingCode-ExtIEs } }   OPTIONAL,
...
}

UL-ScramblingCode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

UL-ScramblingCodeNumber ::= INTEGER (0..16777215)

UL-ScramblingCodeLength ::= ENUMERATED {
    short,
    long
}

UL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-TimeSlot-ISCP-InfoItem

UL-TimeSlot-ISCP-InfoItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    iSCP                    UL-TimeslotISCP-Value,
    iE-Extensions          ProtocolExtensionContainer { { UL-TimeSlot-ISCP-InfoItem-ExtIEs } } OPTIONAL,
    ...
}

UL-TimeSlot-ISCP-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeSlot-ISCP-LCR-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-TimeSlot-ISCP-LCR-InfoItem

UL-TimeSlot-ISCP-LCR-InfoItem ::= SEQUENCE {
    timeSlotLCR            TimeSlotLCR,
    iSCP                  UL-TimeslotISCP-Value,
    iE-Extensions        ProtocolExtensionContainer { { UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs } } OPTIONAL,
    ...
}

UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-Information ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationItem

USCH-InformationItem ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    cCTrCH-ID             CCTrCH-ID,
    transportFormatSet    TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    iE-Extensions        ProtocolExtensionContainer { { USCH-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

USCH-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationResponseItem

USCH-InformationResponseItem ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    bindingID              BindingID OPTIONAL,

```

```

transportLayerAddress      TransportLayerAddress  OPTIONAL,
iE-Extensions              ProtocolExtensionContainer { { USCH-InformationResponseItem-ExtIEs } }  OPTIONAL,
...
}

```

```

USCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

UL-TimeslotISCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]

```

```

UL-TimeslotISCP-Value-IncrDecrThres ::= INTEGER (0..126)

```

```

USCH-ID ::= INTEGER (0..255)

```

```

-- =====
-- V
-- =====

```

```

-- =====
-- W
-- =====

```

```

-- =====
-- X
-- =====

```

```

-- =====
-- Y
-- =====

```

```

-- =====
-- Z
-- =====

```

END

9.3.5 Common Definitions

```

-- *****
--
-- Common definitions
--
-- *****

```

```

NBAP-CommonDataTypes {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-CommonDataTypes (3) }

```

DEFINITIONS AUTOMATIC TAGS ::=

```

BEGIN
-- *****
--
-- Extension constants
--
-- *****

maxPrivateIEs          INTEGER ::= 65535
maxProtocolExtensions  INTEGER ::= 65535
maxProtocolIEs         INTEGER ::= 65535

-- *****
--
-- Common Data Types
--
-- *****

Criticality           ::= ENUMERATED { reject, ignore, notify }

MessageDiscriminator  ::= ENUMERATED { common, dedicated }

Presence              ::= ENUMERATED { optional, conditional, mandatory }

PrivateIE-ID          ::= CHOICE {
    local              INTEGER (0..maxPrivateIEs),
    global              OBJECT IDENTIFIER
}

ProcedureCode         ::= INTEGER (0..255)

ProcedureID           ::= SEQUENCE {
    procedureCode      ProcedureCode,
    ddMode              ENUMERATED { tdd, fdd, common, ... }
}

ProtocolIE-ID         ::= INTEGER (0..maxProtocolIEs)

TransactionID         ::= CHOICE {
    shortTransActionId  INTEGER (0..127),
    longTransActionId   INTEGER (0..32767)
}

TriggeringMessage     ::= ENUMERATED { initiating-message, successful-outcome, unsuccessful-outcome, outcome }

END

```

9.3.6 Constant Definitions

```

-- *****

```

```

--
-- Constant definitions
--
-- *****

NBAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Constants (4)}

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    ProcedureCode,
    ProtocolIE-ID
FROM NBAP-CommonDataTypes;

-- *****
--
-- Elementary Procedures
--
-- *****

id-audit                               ProcedureCode ::= 0
id-auditRequired                       ProcedureCode ::= 1
id-blockResource                       ProcedureCode ::= 2
id-cellDeletion                        ProcedureCode ::= 3
id-cellReconfiguration                 ProcedureCode ::= 4
id-cellSetup                           ProcedureCode ::= 5
id-cellSynchronisationInitiation       ProcedureCode ::= 45
id-cellSynchronisationReconfiguration   ProcedureCode ::= 46
id-cellSynchronisationReporting        ProcedureCode ::= 47
id-cellSynchronisationTermination      ProcedureCode ::= 48
id-cellSynchronisationFailure          ProcedureCode ::= 49
id-commonMeasurementFailure            ProcedureCode ::= 6
id-commonMeasurementInitiation         ProcedureCode ::= 7
id-commonMeasurementReport             ProcedureCode ::= 8
id-commonMeasurementTermination        ProcedureCode ::= 9
id-commonTransportChannelDelete        ProcedureCode ::= 10
id-commonTransportChannelReconfigure   ProcedureCode ::= 11
id-commonTransportChannelSetup         ProcedureCode ::= 12
id-compressedModeCommand               ProcedureCode ::= 14
id-dedicatedMeasurementFailure         ProcedureCode ::= 16
id-dedicatedMeasurementInitiation      ProcedureCode ::= 17
id-dedicatedMeasurementReport          ProcedureCode ::= 18
id-dedicatedMeasurementTermination     ProcedureCode ::= 19
id-downlinkPowerControl                ProcedureCode ::= 20
id-downlinkPowerTimeslotControl        ProcedureCode ::= 38
id-errorIndicationForCommon            ProcedureCode ::= 35
id-errorIndicationForDedicated         ProcedureCode ::= 21
id-informationExchangeFailure          ProcedureCode ::= 40
id-informationExchangeInitiation       ProcedureCode ::= 41

```

```

id-informationExchangeTermination      ProcedureCode ::= 42
id-informationReporting                 ProcedureCode ::= 43
id-physicalSharedChannelReconfiguration ProcedureCode ::= 37
id-privateMessageForCommon             ProcedureCode ::= 36
id-privateMessageForDedicated          ProcedureCode ::= 22
id-radioLinkAddition                   ProcedureCode ::= 23
id-radioLinkDeletion                   ProcedureCode ::= 24
id-radioLinkFailure                    ProcedureCode ::= 25
id-radioLinkPreemption                 ProcedureCode ::= 39
id-radioLinkRestoration                 ProcedureCode ::= 26
id-radioLinkSetup                       ProcedureCode ::= 27
id-reset                               ProcedureCode ::= 13
id-resourceStatusIndication            ProcedureCode ::= 28
id-cellSynchronisationAdjustment       ProcedureCode ::= 44
id-synchronisedRadioLinkReconfigurationCancellation ProcedureCode ::= 29
id-synchronisedRadioLinkReconfigurationCommit ProcedureCode ::= 30
id-synchronisedRadioLinkReconfigurationPreparation ProcedureCode ::= 31
id-systemInformationUpdate             ProcedureCode ::= 32
id-unblockResource                     ProcedureCode ::= 33
id-unSynchronisedRadioLinkReconfiguration ProcedureCode ::= 34

```

```

-- *****
--
-- Lists
--
-- *****

```

```

maxNrOfCodes          INTEGER ::= 10
maxNrOfDLTSs          INTEGER ::= 15
maxNrOfDLTSLCRs       INTEGER ::= 6
maxNrOfErrors         INTEGER ::= 256
maxNrOfTFs            INTEGER ::= 32
maxNrOfTFCs           INTEGER ::= 1024
maxNrOfRRLs           INTEGER ::= 16
maxNrOfRRLs-1         INTEGER ::= 15 -- maxNrOfRRLs - 1
maxNrOfRRLs-2         INTEGER ::= 14 -- maxNrOfRRLs - 2
maxNrOfRRLSets        INTEGER ::= maxNrOfRRLs
maxNrOfDPCHs          INTEGER ::= 240
maxNrOfDPCHLCRs       INTEGER ::= 240
maxNrOfSCCPCHs        INTEGER ::= 8
maxNrOfCPCHs          INTEGER ::= 16
maxNrOfPCPCHs         INTEGER ::= 64
maxNrOfDCHs           INTEGER ::= 128
maxNrOfDSCHs          INTEGER ::= 32
maxNrOfFACHs          INTEGER ::= 8
maxNrOfCCTrCHs        INTEGER ::= 16
maxNrOfPDSCHs         INTEGER ::= 256
maxNrOfPUSCHs         INTEGER ::= 256
maxNrOfPDSCHSets      INTEGER ::= 256
maxNrOfPRACHLCRs      INTEGER ::= 8
maxNrOfPUSCHSets      INTEGER ::= 256
maxNrOfSCCPCHLCRs     INTEGER ::= 8
maxNrOfULTSs          INTEGER ::= 15

```

```

maxNrOfULTSLCRs          INTEGER ::= 6
maxNrOfUSCHs             INTEGER ::= 32
maxAPSigNum              INTEGER ::= 16
maxNrOfSlotFormatsPRACH  INTEGER ::= 8
maxCellinNodeB           INTEGER ::= 256
maxCCPinNodeB            INTEGER ::= 256
maxCPCHCell              INTEGER ::= maxNrOfCPCHs
maxCTFC                  INTEGER ::= 16777215
maxLocalCellinNodeB      INTEGER ::= maxCellinNodeB
maxNoofLen                INTEGER ::= 7
maxFPACHCell             INTEGER ::= 8
maxRACHCell              INTEGER ::= maxPRACHCell
maxPRACHCell             INTEGER ::= 16
maxPCPCHCell            INTEGER ::= 64
maxSCCPCHCell           INTEGER ::= 32
maxSCPICHCell           INTEGER ::= 32
maxTTI-count             INTEGER ::= 4
maxIBSEG                 INTEGER ::= 16
maxIB                     INTEGER ::= 64
maxFACHCell              INTEGER ::= 256 -- maxNrOfFACHs * maxSCCPCHCell
maxRateMatching          INTEGER ::= 256
maxCodeNrComp-1          INTEGER ::= 256
maxNrOfCellSyncBursts    INTEGER ::= 10
maxNrOfCodeGroups        INTEGER ::= 256
maxNrOfReceptsPerSyncFrame  INTEGER ::= 16
maxNrOfMeasNCell         INTEGER ::= 96
maxNrOfMeasNCell-1       INTEGER ::= 95 -- maxNrOfMeasNCell - 1
maxNrOfTFCIGroups        INTEGER ::= 256
maxNrOfTFCI1Combs        INTEGER ::= 512
maxNrOfTFCI2Combs        INTEGER ::= 1024
maxNrOfTFCI2Combs-1      INTEGER ::= 1023
maxNrOfSF                 INTEGER ::= 8
maxTGPS                  INTEGER ::= 6
maxCommunicationContext   INTEGER ::= 1048575
maxNrOfLevels            INTEGER ::= 256
maxNoSat                  INTEGER ::= 16
maxNoGPSItems            INTEGER ::= 8

-- *****
--
-- IEs
--
-- *****

id-AICH-Information          ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 1
id-BCH-Information          ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 8
id-BCCH-ModificationTime    ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator ProtocolIE-ID ::= 10
id-Cause                     ProtocolIE-ID ::= 13
id-CCP-InformationItem-AuditRsp ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp ProtocolIE-ID ::= 15

```

id-CCP-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 19
id-CellParameterID	ProtocolIE-ID ::= 23
id-CFN	ProtocolIE-ID ::= 24
id-C-ID	ProtocolIE-ID ::= 25
id-CommonMeasurementAccuracy	ProtocolIE-ID ::= 39
id-CommonMeasurementObjectType-CM-Rprt	ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst	ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp	ProtocolIE-ID ::= 33
id-CommonMeasurementType	ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID	ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 37
id-CommunicationControlPortID	ProtocolIE-ID ::= 40
id-ConfigurationGenerationID	ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID	ProtocolIE-ID ::= 44
id-CriticalityDiagnostics	ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD	ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD	ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 54
id-DCH-DeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 55
id-DCH-FDD-Information	ProtocolIE-ID ::= 56
id-DCH-TDD-Information	ProtocolIE-ID ::= 57
id-DCH-InformationResponse	ProtocolIE-ID ::= 59
id-FDD-DCHs-to-Modify	ProtocolIE-ID ::= 62
id-TDD-DCHs-to-Modify	ProtocolIE-ID ::= 63
id-DCH-ModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 65
id-DedicatedMeasurementObjectType-DM-Rprt	ProtocolIE-ID ::= 67
id-DedicatedMeasurementObjectType-DM-Rqst	ProtocolIE-ID ::= 68
id-DedicatedMeasurementObjectType-DM-Rsp	ProtocolIE-ID ::= 69
id-DedicatedMeasurementType	ProtocolIE-ID ::= 70
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 72
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 73
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 76
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 79
id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 83
id-DL-ReferencePowerInformationItem-DL-PC-Rqst	ProtocolIE-ID ::= 84
id-DLReferencePower	ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 86
id-DSCH-AddItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 87
id-DSCHs-to-Add-FDD	ProtocolIE-ID ::= 89
id-DSCH-DeleteItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 91
id-DSCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 98

id-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 100
id-DSCH-InformationResponse	ProtocolIE-ID ::= 105
id-DSCH-FDD-Information	ProtocolIE-ID ::= 106
id-DSCH-TDD-Information	ProtocolIE-ID ::= 107
id-DSCH-ModifyItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 108
id-DSCH-ModifyList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 112
id-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 113
id-FACH-Information	ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd	ProtocolIE-ID ::= 123
id-Local-Cell-ID	ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 128
id-AdjustmentPeriod	ProtocolIE-ID ::= 129
id-MaxAdjustmentStep	ProtocolIE-ID ::= 130
id-MaximumTransmissionPower	ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 132
id-MeasurementID	ProtocolIE-ID ::= 133
id-MessageStructure	ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst	ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID	ProtocolIE-ID ::= 143
id-NeighbouringCellMeasurementInformation	ProtocolIE-ID ::= 455
id-P-CCPCH-Information	ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 145
id-P-CPICH-Information	ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 147
id-P-SCH-Information	ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 156
id-PCH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 157
id-PCH-Information	ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 165
id-PICH-Information	ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 168
id-PowerAdjustmentType	ProtocolIE-ID ::= 169
id-PRACH-Information	ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 176

id-PrimaryCPICH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 189
id-RACH-Information	ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 197
id-ReportCharacteristics	ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD	ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRqst	ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRqstFDD	ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRqstFDD	ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRqst	ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 214
id-RL-InformationList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 215
id-RL-InformationList-RL-SetupRqstFDD	ProtocolIE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady	ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-ReconfRsp	ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 221
id-RL-InformationResponseList-RL-ReconfReady	ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-ReconfRsp	ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 225
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 228
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 229
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure	ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 241

id-RL-Set-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 242
id-S-CCPCH-Information	ProtocolIE-ID ::= 247
id-S-CPICH-Information	ProtocolIE-ID ::= 249
id-SCH-Information	ProtocolIE-ID ::= 251
id-S-SCH-Information	ProtocolIE-ID ::= 253
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD	ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD	ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 264
id-SecondarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate	ProtocolIE-ID ::= 266
id-SFN	ProtocolIE-ID ::= 268
id-ShutdownTimer	ProtocolIE-ID ::= 269
id-Start-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 114
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 270
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 271
id-SyncCase	ProtocolIE-ID ::= 274
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH	ProtocolIE-ID ::= 275
id-T-Cell	ProtocolIE-ID ::= 276
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 277
id-TimeSlotConfigurationList-Cell-SetupRqstTDD	ProtocolIE-ID ::= 278
id-TransmissionDiversityApplied	ProtocolIE-ID ::= 279
id-TypeOfError	ProtocolIE-ID ::= 508
id-UARFCNforNt	ProtocolIE-ID ::= 280
id-UARFCNforNd	ProtocolIE-ID ::= 281
id-UARFCNforNu	ProtocolIE-ID ::= 282
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 284
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 285
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 288
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 289
id-UL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 291
id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 293
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 294
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 295
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 296
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 297
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD	ProtocolIE-ID ::= 300
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD	ProtocolIE-ID ::= 301
id-USCH-Information-Add	ProtocolIE-ID ::= 302
id-USCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 304
id-USCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 306
id-USCH-InformationResponse	ProtocolIE-ID ::= 309
id-USCH-Information	ProtocolIE-ID ::= 310
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 315
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 316
id-AdjustmentRatio	ProtocolIE-ID ::= 317
id-AP-AICH-Information	ProtocolIE-ID ::= 320
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 323

id-CauseLevel-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 324
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 329
id-CDCA-ICH-Information	ProtocolIE-ID ::= 330
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode	ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag	ProtocolIE-ID ::= 335
id-CPCH-Information	ProtocolIE-ID ::= 336
id-CPCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 342
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count	ProtocolIE-ID ::= 358
id-DPC-Mode	ProtocolIE-ID ::= 450
id-DPCHConstant	ProtocolIE-ID ::= 359
id-DSCH-FDD-Common-Information	ProtocolIE-ID ::= 94
id-EnhancedDSCHPC	ProtocolIE-ID ::= 110
id-EnhancedDSCHPCIndicator	ProtocolIE-ID ::= 111
id-FACH-ParametersList-CTCH-SetupRsp	ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 375
id-PCPCH-Information	ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 380
id-PRACHConstant	ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 383
id-PUSCHConstant	ProtocolIE-ID ::= 384
id-RACH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 385
id-SSDT-CellIDforEDSCHPC	ProtocolIE-ID ::= 443
id-Synchronisation-Configuration-Cell-ReconfRqst	ProtocolIE-ID ::= 393
id-Synchronisation-Configuration-Cell-SetupRqst	ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 398
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 403

id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 407
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 408
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 409
id-CommunicationContextInfoItem-Reset	ProtocolIE-ID ::= 412
id-CommunicationControlPortInfoItem-Reset	ProtocolIE-ID ::= 414
id-ResetIndicator	ProtocolIE-ID ::= 416
id-TFCI2-Bearer-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 417
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD	ProtocolIE-ID ::= 418
id-TFCI2-BearerInformationResponse	ProtocolIE-ID ::= 419
id-TimingAdvanceApplied	ProtocolIE-ID ::= 287
id-CFNReportingIndicator	ProtocolIE-ID ::= 6
id-SFNReportingIndicator	ProtocolIE-ID ::= 11
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 12
id-TimeslotISCPInfo	ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 47
id-CauseLevel-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 420
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 421
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD	ProtocolIE-ID ::= 494
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 482
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 422
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 423
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 424
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 425
id-CellSyncBurstTransInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 426
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 427
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 428
id-CellSyncInfo-CellSyncReprtTDD	ProtocolIE-ID ::= 429
id-CSBTransmissionID	ProtocolIE-ID ::= 430
id-CSBMeasurementID	ProtocolIE-ID ::= 431
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 432
id-NCyclesPerSFNperiod	ProtocolIE-ID ::= 433
id-NRepetitionsPerCyclePeriod	ProtocolIE-ID ::= 434
id-SyncFrameNumber	ProtocolIE-ID ::= 437
id-SynchronisationReportType	ProtocolIE-ID ::= 438
id-SynchronisationReportCharacteristics	ProtocolIE-ID ::= 439
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 440
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 119
id-ReferenceClockAvailability	ProtocolIE-ID ::= 435
id-ReferenceSFNoffset	ProtocolIE-ID ::= 436
id-InformationExchangeID	ProtocolIE-ID ::= 444
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 445
id-InformationType	ProtocolIE-ID ::= 446
id-InformationReportCharacteristics	ProtocolIE-ID ::= 447
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 448
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 449
id-IPDLParameter-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 451
id-IPDLParameter-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 452
id-IPDLParameter-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 453

id-IPDLParameter-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 454
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 74
id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 75
id-DwPCH-LCR-Information	ProtocolIE-ID ::= 78
id-DwPCH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 80
id-DwPCH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 90
id-DwPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 97
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 99
id-DwPCH-LCR-Information-ResourceStatusInd	ProtocolIE-ID ::= 101
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 154
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 174
id-FPACH-LCR-Information	ProtocolIE-ID ::= 290
id-FPACH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 292
id-FPACH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 22
id-FPACH-LCR-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 311
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 312
id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 313
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 314
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 456
id-PCH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 457
id-PCH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 458
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 459
id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 460
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 461
id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 462
id-RL-InformationResponse-LCR-RL-SetupRspTDD	ProtocolIE-ID ::= 463
id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 464
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 465
id-TimeSlot	ProtocolIE-ID ::= 495
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 466
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 467
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD	ProtocolIE-ID ::= 468
id-TimeSlotLCR-CM-Rqst	ProtocolIE-ID ::= 469
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 470
id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 471
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 472
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 473
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 474
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 475
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 476
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 477
id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 478
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 479
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD	ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationModify-AddList	ProtocolIE-ID ::= 483
id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 484
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 485
id-UL-SIRTarget	ProtocolIE-ID ::= 510
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 486
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 487
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 488
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 489

id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 490
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 491
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 493
id-timeslotInfo-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 496
id-SyncReportType-CellSyncReprtTDD	ProtocolIE-ID ::= 497
id-PUSCH-Info-DM-Rqst	ProtocolIE-ID ::= 505
id-PUSCH-Info-DM-Rsp	ProtocolIE-ID ::= 506
id-PUSCH-Info-DM-Rprt	ProtocolIE-ID ::= 507
id-InitDL-Power	ProtocolIE-ID ::= 509
id-cellSyncBurstRepetitionPeriod	ProtocolIE-ID ::= 511
id-ReportCharacteristicsType-OnModification	ProtocolIE-ID ::= 512
id-SFNFSNMeasurementValueInformation	ProtocolIE-ID ::= 513
id-SFNFSNMeasurementThresholdInformation	ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation	ProtocolIE-ID ::= 515
id-TUTRANGPSMeasurementThresholdInformation	ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 520
id-RL-InformationResponse-LCR-RL-AdditionRspTDD	ProtocolIE-ID ::= 51

END

9.3.7 Container Definitions

```
-- *****
--
-- Container definitions
--
-- *****

NBAP-Containers {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Containers (5) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    maxProtocolExtensions,
    maxPrivateIEs,
    maxProtocolIEs,
    Criticality,
    Presence,
    PrivateIE-ID,
    ProtocolIE-ID
```

```

FROM NBAP-CommonDataTypes;

-- *****
--
-- Class Definition for Protocol IEs
--
-- *****

NBAP-PROTOCOL-IES ::= CLASS {
    &id      ProtocolIE-ID      UNIQUE,
    &criticality    Criticality,
    &Value,
    &presence    Presence
}
WITH SYNTAX {
    ID      &id
    CRITICALITY &criticality
    TYPE      &Value
    PRESENCE  &presence
}

-- *****
--
-- Class Definition for Protocol IEs
--
-- *****

NBAP-PROTOCOL-IES-PAIR ::= CLASS {
    &id      ProtocolIE-ID      UNIQUE,
    &firstCriticality    Criticality,
    &FirstValue,
    &secondCriticality    Criticality,
    &SecondValue,
    &presence    Presence
}
WITH SYNTAX {
    ID      &id
    FIRST CRITICALITY    &firstCriticality
    FIRST TYPE      &FirstValue
    SECOND CRITICALITY &secondCriticality
    SECOND TYPE      &SecondValue
    PRESENCE      &presence
}

-- *****
--
-- Class Definition for Protocol Extensions
--
-- *****

NBAP-PROTOCOL-EXTENSION ::= CLASS {
    &id      ProtocolIE-ID      UNIQUE,
    &criticality    Criticality,

```



```

    &Extension,
    &presence      Presence
}
WITH SYNTAX {
    ID      &id
    CRITICALITY &criticality
    EXTENSION &Extension
    PRESENCE  &presence
}

-- *****
--
-- Class Definition for Private IES
--
-- *****

NBAP-PRIVATE-IES ::= CLASS {
    &id      PrivateIE-ID,
    &criticality Criticality,
    &Value,
    &presence      Presence
}
WITH SYNTAX {
    ID      &id
    CRITICALITY &criticality
    TYPE    &Value
    PRESENCE &presence
}

-- *****
--
-- Container for Protocol IES
--
-- *****

ProtocolIE-Container {NBAP-PROTOCOL-IES : IEsSetParam} ::=
    SEQUENCE (SIZE (0..maxProtocolIEs)) OF
    ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Single-Container {NBAP-PROTOCOL-IES : IEsSetParam} ::=
    ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Field {NBAP-PROTOCOL-IES : IEsSetParam} ::= SEQUENCE {
    id      NBAP-PROTOCOL-IES.&id      ({IEsSetParam}),
    criticality NBAP-PROTOCOL-IES.&criticality ({IEsSetParam}{@id}),
    value     NBAP-PROTOCOL-IES.&Value   ({IEsSetParam}{@id})
}

-- *****
--
-- Container for Protocol IE Pairs
--
-- *****

```

```

ProtocolIE-ContainerPair {NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=
  SEQUENCE (SIZE (0..maxProtocolIEs)) OF
  ProtocolIE-FieldPair {{IEsSetParam}}

ProtocolIE-FieldPair {NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::= SEQUENCE {
  id                NBAP-PROTOCOL-IES-PAIR.&id                ({IEsSetParam}),
  firstCriticality  NBAP-PROTOCOL-IES-PAIR.&firstCriticality  ({IEsSetParam}{@id}),
  firstValue        NBAP-PROTOCOL-IES-PAIR.&firstValue        ({IEsSetParam}{@id}),
  secondCriticality NBAP-PROTOCOL-IES-PAIR.&secondCriticality ({IEsSetParam}{@id}),
  secondValue       NBAP-PROTOCOL-IES-PAIR.&secondValue       ({IEsSetParam}{@id})
}

-- *****
--
-- Container Lists for Protocol IE Containers
--
-- *****

ProtocolIE-ContainerList {INTEGER : lowerBound, INTEGER : upperBound, NBAP-PROTOCOL-IES : IEsSetParam} ::=
  SEQUENCE (SIZE (lowerBound..upperBound)) OF
  ProtocolIE-Container {{IEsSetParam}}

ProtocolIE-ContainerPairList {INTEGER : lowerBound, INTEGER : upperBound, NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=
  SEQUENCE (SIZE (lowerBound..upperBound)) OF
  ProtocolIE-ContainerPair {{IEsSetParam}}

-- *****
--
-- Container for Protocol Extensions
--
-- *****

ProtocolExtensionContainer {NBAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::=
  SEQUENCE (SIZE (1..maxProtocolExtensions)) OF
  ProtocolExtensionField {{ExtensionSetParam}}

ProtocolExtensionField {NBAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::= SEQUENCE {
  id                NBAP-PROTOCOL-EXTENSION.&id                ({ExtensionSetParam}),
  criticality       NBAP-PROTOCOL-EXTENSION.&criticality       ({ExtensionSetParam}{@id}),
  extensionValue    NBAP-PROTOCOL-EXTENSION.&extensionValue    ({ExtensionSetParam}{@id})
}

-- *****
--
-- Container for Private IEs
--
-- *****

PrivateIE-Container {NBAP-PRIVATE-IES : IEsSetParam} ::=
  SEQUENCE (SIZE (1..maxPrivateIEs)) OF
  PrivateIE-Field {{IEsSetParam}}

```

```
PrivateIE-Field {NBAP-PRIVATE-IES : IEsSetParam} ::= SEQUENCE {  
  id          NBAP-PRIVATE-IES.&id  
  ({{IEsSetParam}}),  
  criticality      NBAP-PRIVATE-IES.&criticality  
  ({{IEsSetParam}}{@id}),  
  value          NBAP-PRIVATE-IES.&Value  
  ({{IEsSetParam}}{@id})  
}
```

END

9.4 Message Transfer Syntax

NBAP shall use the ASN.1 Basic Packed Encoding Rules (BASIC-PER) Aligned Variant as transfer syntax as specified in ref. [11].

The following encoding rules apply in addition to what has been specified in X.691 [11]:

When a bitstring value is placed in a bit-field as specified in 15.6 to 15.11 in [11], the leading bit of the bitstring value shall be placed in the leading bit of the bit-field, and the trailing bit of the bitstring value shall be placed in the trailing bit of the bit-field.

NOTE - When using the "bstring" notation, the leading bit of the bitstring value is on the left, and the trailing bit of the bitstring value is on the right. The term 'leading bit' is to be interpreted as equal to the term 'first bit' defined in [12].

9.5 Timers

$T_{Preempt}$

- Specifies the maximum time that a Node B may wait for pre-emption of resources for establishment or reconfiguration of Radio Links.

10 Handling of Unknown, Unforeseen and Erroneous Protocol Data

10.1 General

Protocol Error cases can be divided into three classes:

- Transfer Syntax Error
- Abstract Syntax Error
- Logical Error

Protocol errors can occur in the following functions within a receiving node:

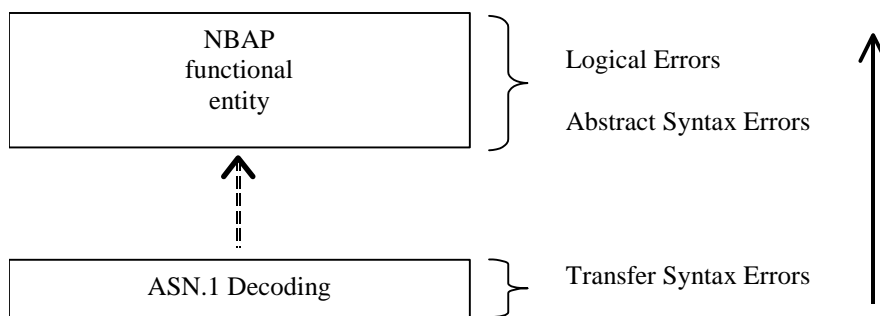


Figure 38: Protocol Errors in NBAP.

The information stated in subclauses 10.2, 10.3 and 10.4, to be included in the message used when reporting an error, is what at minimum shall be included. Other optional information elements within the message may also be included, if available. This is also valid for the case when the reporting is done with a response message. The latter is an exception to what is stated in subclause 4.1.

10.2 Transfer Syntax Error

A Transfer Syntax Error occurs when the receiver is not able to decode the received physical message. Transfer syntax errors are always detected in the process of ASN.1 decoding. If a Transfer Syntax Error occurs, the receiver should initiate Error Indication procedure with appropriate cause value for the Transfer Syntax protocol error.

Examples for Transfer Syntax Errors are:

- Violation of value ranges in ASN.1 definition of messages. e.g.: If an IE has a defined value range of 0 to 10 (ASN.1: INTEGER (0..10)), and 12 will be received, then this will be treated as a transfer syntax error.
- Violation in list element constraints. e.g.: If a list is defined as containing 1 to 10 elements, and 12 elements will be received, then this case will be handled as a transfer syntax error.
- Missing mandatory elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).
- Wrong order of elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).

10.3 Abstract Syntax Error

10.3.1 General

An Abstract Syntax Error occurs when the receiving functional NBAP entity:

1. receives IEs or IE groups that cannot be understood (unknown id);
2. receives IEs for which the logical range is violated (e.g.: ASN.1 definition: 0 to 15, the logical range is 0 to 10 (values 11 to 15 are undefined), and 12 will be received; this case will be handled as an abstract syntax error using criticality information sent by the originator of the message);
3. does not receive IEs or IE groups but according to the specified presence of the **concerningconcerned** object, the IEs or IE groups should have been present in the received message;
4. receives IEs or IE groups that are defined to be part of that message in wrong order or with too many occurrences of the same IE or IE group;
5. receives IEs or IE groups but according to the conditional presence of the **concerningconcerned** object and the specified condition, the IEs or IE groups should not have been present in the received message.

Cases 1 and 2 (not comprehended IE/IE group) are handled based on received Criticality information. Case 3 (missing IE/IE group) is handled based on Criticality information and Presence information for the missing IE/IE group specified in the version of the specification used by the receiver. Case 4 (IEs or IE groups in wrong order or with too many occurrences) and Case 5 (erroneously present conditional IEs or IE groups) result in rejecting the procedure.

If an Abstract Syntax Error occurs, the receiver shall read the remaining message and shall then for each detected Abstract Syntax Error that belong to cases 1-3 act according to the Criticality Information and Presence Information for the IE/IE group due to which Abstract Syntax Error occurred in accordance with subclauses 10.3.4 and 10.3.5. The handling of cases 4 and 5 is specified in subclause 10.3.6.

10.3.2 Criticality Information

In the NBAP messages there is criticality information set for individual IEs and/or IE groups. This criticality information instructs the receiver how to act when receiving an IE or an IE group that is not comprehended, i.e. the entire item (IE or IE group) which is not (fully or partially) comprehended shall be treated in accordance with its own criticality information as specified in subclause 10.3.4.

In addition, the criticality information is used in case of the missing IE/IE group abstract syntax error (see subclause 10.3.5).

The receiving node shall take different actions depending on the value of the Criticality Information. The three possible values of the Criticality Information for an IE/IE group are:

- Reject IE
- Ignore IE and Notify Sender
- Ignore IE

The following rules restrict when a receiving entity may consider an IE, an IE group or an EP not comprehended (not implemented), and when action based on criticality information is applicable:

1. IE or IE group: When one new or modified IE or IE group is implemented for one EP from a standard version, then other new or modified IEs or IE groups specified for that EP in that standard version shall be considered comprehended by the receiving entity (some may still remain unsupported).

Note that this restriction is applicable to a sending entity for constructing messages.

2. EP: The comprehension of different EPs within a standard version or between different standard versions is not mandated. Any EP that is not supported may be considered not comprehended, even if another EP from that standard version is comprehended, and action based on criticality shall be applied.

When the criticality information cannot even be decoded in a not comprehended IE or IE group, the Error Indication procedure shall be initiated with an appropriate cause value.

10.3.3 Presence Information

For many IEs/IE groups which are optional according to the ASN.1 transfer syntax, NBAP specifies separately if the presence of these IEs/IE groups is optional or mandatory with respect to RNS application by means of the presence field of the ~~concerning~~concerned object of class NBAP-PROTOCOL-IES, NBAP-PROTOCOL-IES-PAIR, NBAP-PROTOCOL-EXTENSION or NBAP-PRIVATE-IES.

The presence field of the indicated classes supports three values:

1. Optional;
2. Conditional;
3. Mandatory.

If an IE/IE group is not included in a received message and the presence of the IE/IE group is mandatory or the presence is conditional and the condition is true according to the version of the specification used by the receiver, an abstract syntax error occurs due to a missing IE/IE group.

If an IE/IE group is included in a received message and the presence of the IE/IE group is conditional and the condition is false according to the version of the specification used by the receiver, an abstract syntax error occurs due to this erroneously present conditional IE/IE group.

10.3.4 Not comprehended IE/IE group

10.3.4.1 Procedure ID

The receiving node shall treat the different types of received criticality information of the *Procedure ID* according to the following:

Reject IE:

- If a message is received with a *Procedure ID* marked with "*Reject IE*" which the receiving node does not comprehend, the receiving node shall reject the procedure using the Error Indication procedure.

Ignore IE and Notify Sender:

- If a message is received with a *Procedure ID* marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the procedure and initiate the Error Indication procedure.

Ignore IE:

- If a message is received with a *Procedure ID* marked with "Ignore IE" which the receiving node does not comprehend, the receiving node shall ignore the procedure.

When using the Error Indication procedure to reject a procedure or to report an ignored procedure it shall include the *Procedure ID* IE, the *Triggering Message* IE, and the *Procedure Criticality* IE in the *Criticality Diagnostics* IE.

10.3.4.1A Type of Message

When the receiving node cannot decode the *Type of Message* IE, the Error Indication procedure shall be initiated with an appropriate cause value.

10.3.4.2 IEs other than the Procedure ID and Type of Message

The receiving node shall treat the different types of received criticality information of an IE/IE group other than the *Procedure ID* according to the following:

Reject IE:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "Reject IE" which the receiving node does not comprehend; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the rejection of one or more IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report unsuccessful outcome is received containing one or more IEs/IE groups marked with "Reject IE" which the receiving node does not comprehend, the receiving node shall terminate the procedure and initiate the Error Indication procedure.
- If a *response* message is received containing one or more IEs/IE groups marked with "Reject IE" that the receiving node does not comprehend, the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

Ignore IE and Notify Sender:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "Ignore IE and Notify Sender" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups and report in the response message of the procedure that one or more IEs/IE groups have been ignored. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the response message, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report the outcome of the procedure is received containing one or more IEs/IE groups marked with "Ignore IE and Notify Sender" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups, and initiate the Error Indication procedure to report that one or more IEs/IE groups have been ignored.
- If a *response* message is received containing one or more IEs/IE groups marked with "Ignore IE and Notify Sender" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups and initiate the Error Indication procedure.

Ignore IE:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "Ignore IE" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and continue with the procedure as if the not comprehended IEs/IE groups were not received using the understood IEs/IE groups.

- If a *response* message is received containing one or more IEs/IE groups marked with "*Ignore IE*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and continue with the procedure as if the not comprehended IEs/IE groups were not received using the understood IEs/IE groups.

When reporting not comprehended IEs/IE groups marked with "*Reject IE*" or "*Ignore IE and Notify Sender*" using a response message defined for the procedure, the *Information Element Criticality Diagnostics IE* shall be included in the *Criticality Diagnostics IE* for each reported IE/IE group. In the *Information Element Criticality Diagnostics IE* the *Repetition Number IE* shall be included and in addition, if the not comprehended IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure IE* shall be included.

When reporting not comprehended IEs/IE groups marked with "*Reject IE*" or "*Ignore IE and Notify Sender*" using the Error Indication procedure, the *Procedure ID IE*, the *Triggering Message IE*, *Procedure Criticality IE*, the *Transaction ID IE*, and the *Information Element Criticality Diagnostics IE* shall be included in the *Criticality Diagnostics IE* for each reported IE/IE group. In the *Information Element Criticality Diagnostics IE* the *Repetition Number IE* shall be included and in addition, if the not comprehended IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure IE* shall be included.

10.3.5 Missing IE or IE gGroup

The receiving node shall treat the missing IE/IE group according to the criticality information for the missing IE/IE group in the received message specified in the version of this specification used by the receiver:

Reject IE:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Reject IE*"; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the missing IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a received message *initiating* a procedure that does not have a message to report unsuccessful outcome is missing one or more IEs/IE groups with specified criticality "*Reject IE*", the receiving node shall terminate the procedure and initiate the Error Indication procedure.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "*Reject IE*", the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

Ignore IE and Notify Sender:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and report in the response message of the procedure that one or more IEs/IE groups were missing. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the response message, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a received message *initiating* a procedure that does not have a message to report the outcome of the procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and initiate the Error Indication procedure to report that one or more IEs/IE groups were missing.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and initiate the Error Indication procedure to report that one or more IEs/IE groups were missing.

Ignore IE:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "Ignore IE", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "Ignore IE", the receiving node shall ignore that those IEs/IE groups are missing and continue with the procedure based on the other IEs/IE groups present in the message.

When reporting missing IEs/IE groups with specified criticality "Reject IE" or "Ignore IE and Notify Sender" using a response message defined for the procedure, the *Information Element Criticality Diagnostics* IE shall be included in the *Criticality Diagnostics* IE for each reported IE/IE group. In the *Information Element Criticality Diagnostics* IE, the *Repetition Number* IE shall be included and in addition, if the missing IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure* IE shall be included.

When reporting missing IEs/IE groups with specified criticality "Reject IE" or "Ignore IE and Notify Sender" using the Error Indication procedure, the *Procedure ID* IE, the *Triggering Message* IE, *Procedure Criticality* IE, the *Transaction ID* IE, and the *Information Element Criticality Diagnostics* IE shall be included in the *Criticality Diagnostics* IE for each reported IE/IE group. In the *Information Element Criticality Diagnostics* IE, the *Repetition Number* IE shall be included and in addition, if the missing IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure* IE shall be included.

10.3.6 IEs or IE groups Received in Wrong Order or With Too Many Occurrences or Erroneously Present

If a message with IEs or IE groups in wrong order or with too many occurrences is received or if IEs or IE groups with a conditional presence are present when the condition is not met (i.e. erroneously present), the receiving node shall behave according to the following:

- If a message *initiating* a procedure is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the cause value "Abstract Syntax Error (Falsely Constructed Message)" using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report unsuccessful outcome is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, the receiving node shall terminate the procedure and initiate the Error Indication procedure, and use cause value "Abstract Syntax Error (Falsely Constructed Message)".
- If a *response* message is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

When determining the correct order only the IEs specified in the specification version used by the receiver shall be considered.

10.4 Logical Error

Logical error situations occur when a message is comprehended correctly, but the information contained within the message is not valid (i.e. semantic error), or describes a procedure which is not compatible with the state of the receiver. In these conditions, the following behaviour shall be performed (unless otherwise specified) as defined by the class of the elementary procedure, irrespective of the criticality of the IEs/IE groups containing the erroneous values.

Class 1:

Where the logical error occurs in a request message of a class 1 procedure, and the procedure has a failure message, the failure message shall be sent with an appropriate cause value.

Typical cause values are:

- Protocol Causes:
 1. Semantic Error
 2. Message not compatible with receiver state

Where the logical error is contained in a request message of a class 1 procedure, and the procedure does not have a failure message, the procedure shall be terminated and the ERROR INDICATION procedure shall be initiated with an appropriate cause value. The *Procedure ID IE*, the *Triggering Message IE* and the *Transaction ID IE* within the *Criticality Diagnostics IE* shall then be included in order to identify the message containing the logical error.

Where the logical error exists in a response message of a class 1 procedure, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.

Class 2:

Where the logical error occurs in a message of a class 2 procedure, the procedure shall be terminated and the ERROR INDICATION procedure shall be initiated with an appropriate cause value. The *Procedure ID IE*, the *Triggering Message IE* and the *Transaction ID IE* within the *Criticality Diagnostics IE* shall then be included in order to identify the message containing the logical error.

10.5 Exceptions

The error handling for all the cases described hereafter shall take precedence over any other error handling described in the other subclause of clause 10.

- If any type of error (Transfer Syntax Error, Abstract Syntax Error or Logical Error) is detected in the ERROR INDICATION message, it shall not trigger the Error Indication procedure in the receiving Node but local error handling.
- In case a response message, failure message or ERROR INDICATION message needs to be returned, but the information necessary to determine the receiver of that message is missing, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.

Annex A (normative): Allocation and Pre-emption of Radio Links in the Node B

A.1 Deriving Allocation Information for a Radio Link

A.1.1 Establishment of a New Radio Link

The Allocation Information for a Radio Link in the case of establishment of a new Radio Link shall be derived as follows:

- The latest received *Allocation/Retention Priority* IE for each transport channel shall be used.

Note: The *Allocation/Retention Priority* IE for a transport channel may have been received in

- a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B or
- b) a procedure adding or modifying the transport channel.

- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all transport channels that are intended to use the Radio Link is set to "no priority", the pre-emption capability of the Radio Link shall be set to ""shall not trigger pre-emption"".
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more of the transport channels that are intended to use the Radio Link is not set to ""no priority"", the allocation priority and the pre-emption capability of the Radio Link shall be set according to the following:
 - The transport channels that have the *Priority Level* IE in the *Allocation/Retention Priority* IE set to "no priority" shall be excluded when setting the allocation priority and pre-emption capability of a Radio Link.
 - The allocation priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all non excluded transport channels that are intended to use the Radio Link.
 - If all non-excluded transport channels that are intended to use a Radio Link to be established have the pre-emption capability, given by the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE, set to ""shall not trigger pre-emption"", the pre-emption capability of the Radio Link shall be set to "shall not trigger pre-emption".
If one or more non-excluded transport channels that are intended to use the Radio Link to be established have the value of the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE set to ""may trigger pre-emption"", the pre-emption capability of the Radio Link shall be set to ""may trigger pre-emption"".

The derived allocation priority and pre-emption capability are only valid during this allocation/retention process.

A.1.2 Modification of an Existing Radio Link

The Allocation Information for a Radio Link in the case of modification of a Radio Link (addition or modification of transport channels using the Radio Link) shall be derived as follows:

- The latest received *Allocation/Retention Priority* IE for each transport channel shall be used.

Note: The *Allocation/Retention Priority* IE for a transport channel may have been received in

- a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B,
- b) a previous procedure adding or modifying the transport channel, or
- c) the current procedure adding or modifying the transport channel.

- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all transport channels to be added or modified in the Radio Link is set to ""no priority"", the pre-emption capability of the Radio Link to be modified shall be set to "shall not trigger pre-emption".

- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more of the transport channels to be added or modified in the Radio Link is not set to “no priority”, the allocation priority of and the pre-emption capability of the Radio Link to be modified shall be set according to the following:
 - The transport channels to be added or modified that have the *Priority Level* IE in the *Allocation/Retention Priority* IE set to “no priority” shall be excluded when setting the allocation priority and pre-emption capability of a Radio Link to be modified.
 - The allocation priority for a Radio Link to be modified shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all the non-excluded transport channels that are to be added or modified.
 - If all non-excluded transport channels that are to be added or modified in the Radio Link have the pre-emption capability, given by the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE, set to “shall not trigger pre-emption”, the pre-emption capability of the Radio Link to be modified shall be set to “shall not trigger pre-emption”.
If one or more of the non-excluded transport channels to be added or modified in the Radio Link have the value of the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE set to “may trigger pre-emption”, the pre-emption capability of the Radio Link to be modified shall be set to “may trigger pre-emption”.

The derived allocation priority and pre-emption capability are only valid during this allocation/retention process.

A.2 Deriving Retention Information for a Radio Link

The Retention Information for an existing Radio Link shall be derived as follows:

- The latest received *Allocation/Retention Priority* IE for each transport channel shall be used.
- Note: The *Allocation/Retention Priority* IE for a transport channel may have been received in
- a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B or
 - b) a procedure adding or modifying the transport channel.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more transport channels using the Radio Link is set to “no priority”, the pre-emption vulnerability of the Radio Link shall be set to “not pre-emptable”.
 - If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all the transport channels using the Radio Link is not set to “no priority”, the retention priority of the Radio Link and the pre-emption vulnerability of the Radio Link shall be set according to the following:
 - The retention priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all transport channels that uses the Radio Link.
 - If all transport channels that uses the Radio Link have the pre-emption vulnerability, given by the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE, set to “pre-emptable”, the pre-emption vulnerability of the Radio Link shall be set to “pre-emptable”.
If one or more transport channels that uses the Radio Link have the value of the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE set to “not pre-emptable”, the pre-emption vulnerability of the Radio Link shall be set to “not pre-emptable”.

The derived retention priority and pre-emption vulnerability are valid until they are changed, or until the Radio Link is deleted. When new transport channels are added to or deleted from the Radio Link or when existing transport channels are modified with regards to the *Allocation/Retention Priority* IE, the retention information shall be derived again according to above.

A.3 The Allocation/Retention Process

The Node B shall establish or modify the resources for a Radio Link according to:

- The value of the Allocation Information (allocation priority and pre-emption capability) of the Radio Link to be established or modified. The Allocation Information is derived according to clause A.1.
- The value of the Retention Information (retention priority and pre-emption vulnerability) of existing Radio Links. The Retention Information derived according to clause A.2.
- The resource situation in the cell.

Whilst the process and the extent of the pre-emption functionality is operator dependent, the pre-emption indicators (pre-emption capability and pre-emption vulnerability) shall be treated as follows:

- If the pre-emption capability for a Radio Link to be established or modified is set to "may trigger pre-emption" and the resource situation so requires, the Node B may trigger the pre-emption process in clause A.4 to free resources for this allocation request.
- If the pre-emption capability for a Radio Link to be established or modified is set to "shall not trigger pre-emption", then this allocation request shall not trigger the pre-emption process in clause A.4.
- If the pre-emption vulnerability for an existing Radio Link is set to "pre-emptable", then this Radio Link shall be included in the pre-emption process in clause A.4.
- If the pre-emption vulnerability for an existing Radio Link is set to "not pre-emptable", then this Radio Link shall not be included in the pre-emption process in clause A.4.

A.4 The Pre-emption Process

The pre-emption process shall only pre-empt Radio Links with lower retention priority than the allocation priority of the Radio Link to be established or modified. The Radio Links to be pre-empted shall be selected in ascending order of the retention priority.

When the pre-emption process detects that one or more Radio Links have to be pre-empted to free resources for a Radio Link(s) to be established or modified, the Node B shall initiate the Radio Link Pre-emption procedure for all the Node B Communication Contexts having Radio Links selected for pre-emption and start the T_{Preempt} timer.

When enough resources are freed to establish or modify the Radio Link(s) according to the request, the Node B shall stop the T_{Preempt} timer and complete the procedure that triggered the pre-emption process in accordance with the "Successful Operation" subclause of the procedure.

If the T_{Preempt} timer expires, the Node B shall regard the procedure that triggered the pre-emption process as failed and complete the procedure in accordance with the "Unsuccessful Operation" subclause of the procedure.

Annex B (informative): Measurement Reporting

When the *Report Characteristics* IE is set to "Event A" (figure B.1), the Measurement Reporting procedure is initiated when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

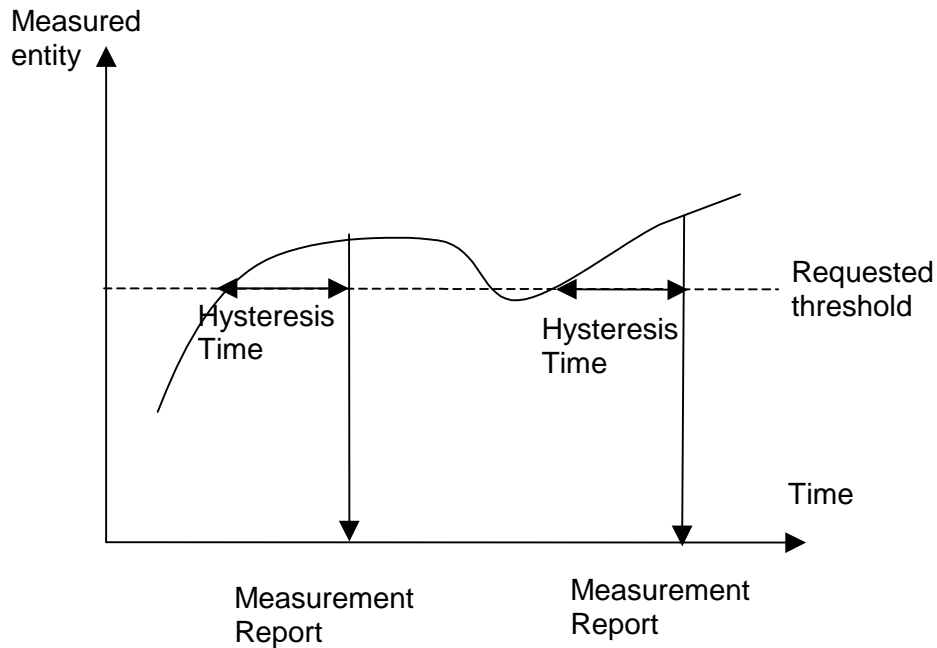


Figure B.1: Event A reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to "Event B" (figure B.2), the Measurement Reporting procedure is initiated when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

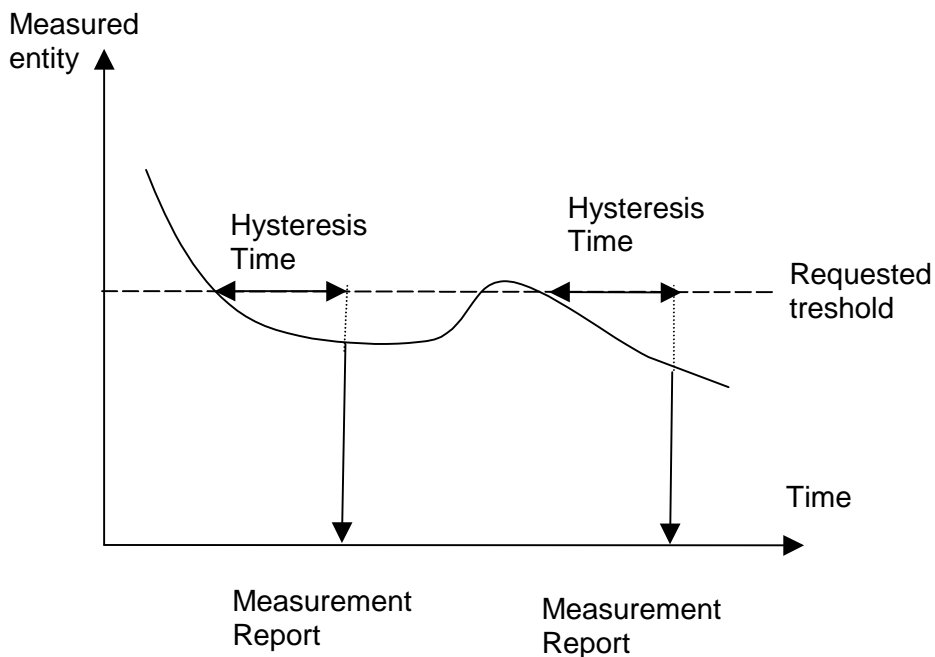


Figure B.2: Event B reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to "Event C" (figure B.3), the Measurement Reporting procedure is initiated always when the measured entity rises by an amount greater than the requested threshold within the requested time. The reporting in figure B.3 is initiated if the Rising Time T1 is less than the requested time.

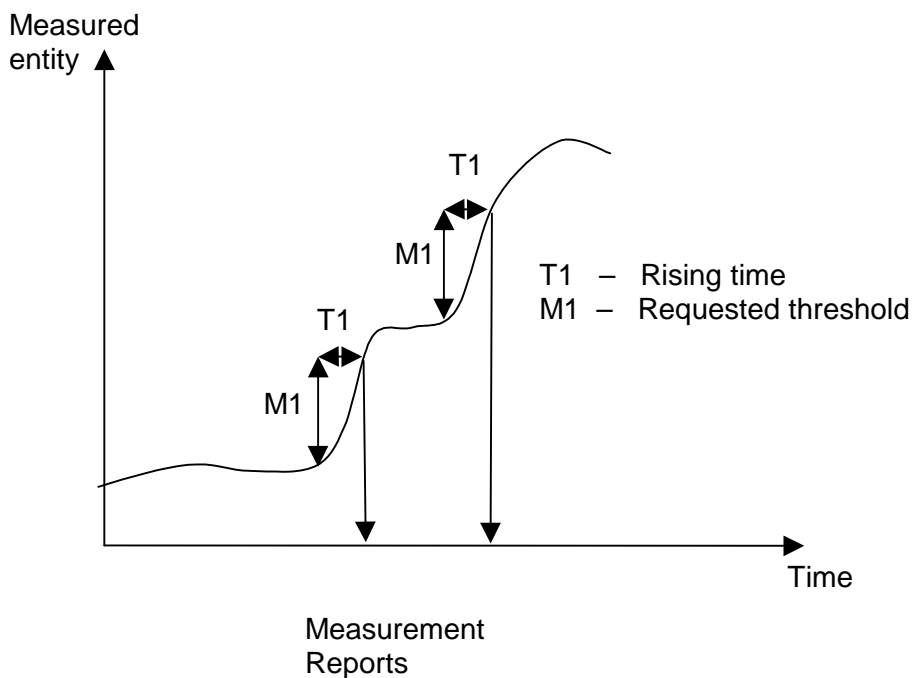


Figure B.3: Event C reporting

When the *Report Characteristics* IE is set to "Event D" (figure B.4), the Measurement Reporting procedure is initiated always when the measured entity falls by an amount greater than the requested threshold within the requested time. The reporting in figure B.4 is initiated if the Falling Time T1 is less than the requested time.

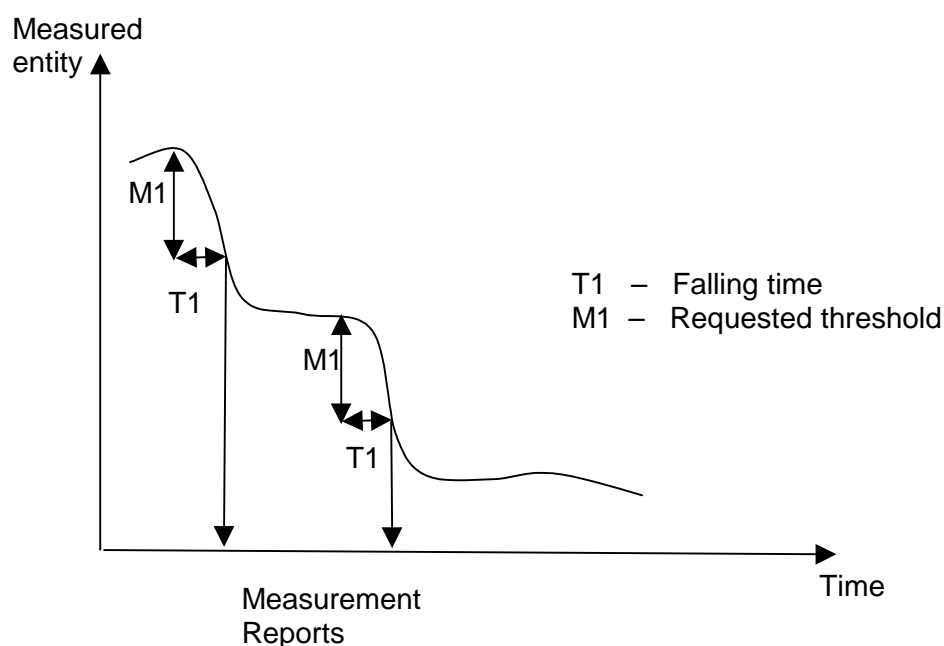


Figure B.4: Event D reporting

When the *Report Characteristics* IE is set to "Event E" (figure B.5), the Measurement Reporting procedure (Report A) is initiated always when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (T1 in figure B.5). If *Report Periodicity* IE is provided Node B shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity falls below the 'Measurement Threshold 1' and is terminated by the Report B.

When the Report A conditions have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time' (T1) Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.

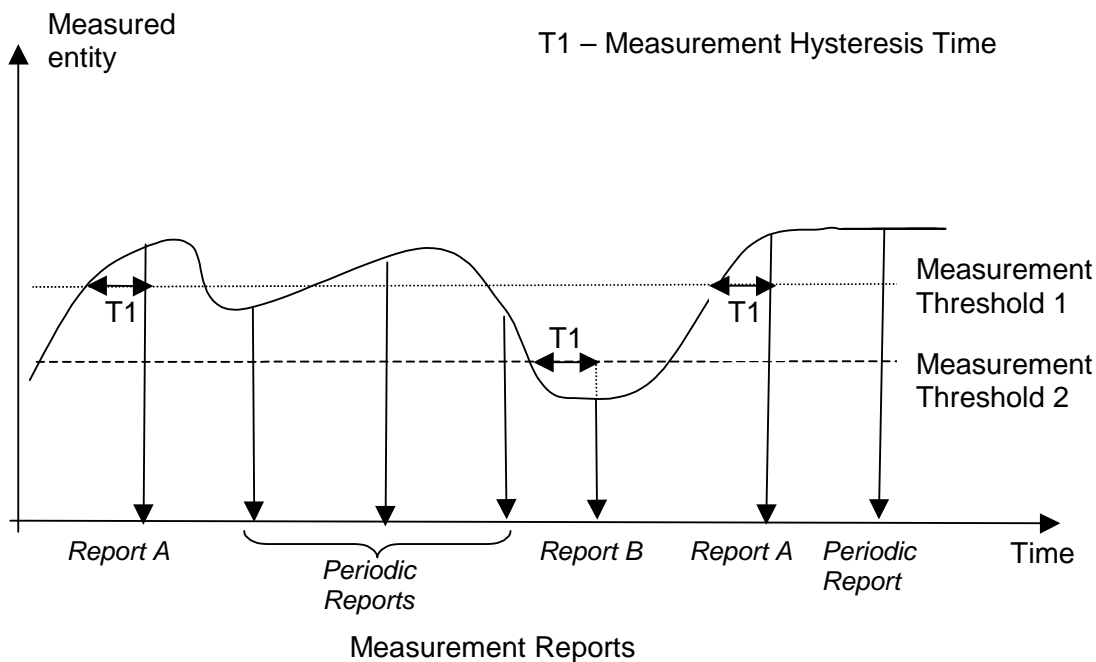


Figure B.5: Event E reporting with Hysteresis Time specified and Periodic Reporting requested

When the *Report Characteristics* IE is set to "Event F" (figure B.6), the Measurement Reporting procedure (Report A) is initiated always when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (T1 in figure B.6). If *Report Periodicity* IE is provided Node B shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity rises above the 'Measurement Threshold 1' and is terminated by the Report B.

When the Report A conditions have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time' (T1) Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.

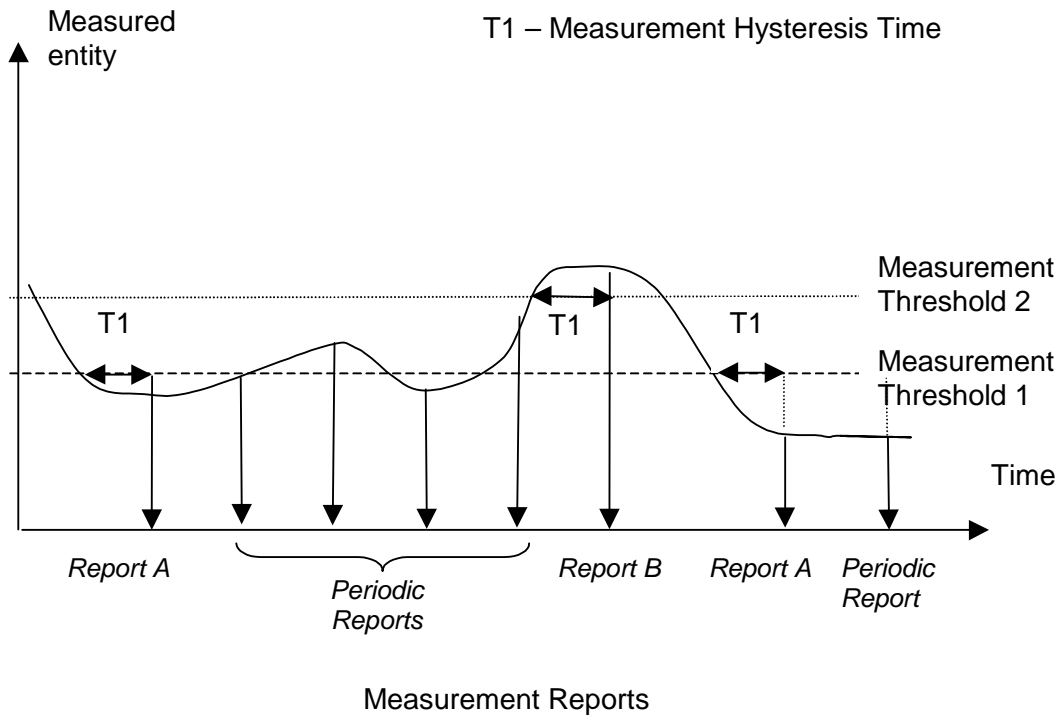


Figure B.6: Event F reporting with Hysteresis Time specified and Periodic Reporting requested

Annex C (informative): Guidelines for Usage of the Criticality Diagnostics IE

C.1 EXAMPLE MESSAGE Layout

Assume the following message format:

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
A	M				YES	reject
B	M				YES	reject
>E		1..<maxE>			EACH	ignore
>>F		1..<maxF>			–	
>>>G		0..3, ...			EACH	ignore
>>H		1..<maxH>			EACH	ignore
>>>G		0..3, ...			EACH	ignore and notify
>>G	M				YES	reject
>>J		1..<maxJ>			–	
>>>G		0..3, ...			EACH	reject
C	M				YES	reject
>K		1..<maxK>			EACH	ignore and notify
>>L		1..<maxL>			–	
>>>M	O				–	
D	M				YES	reject

Note 1. The IEs F, J, and L do not have assigned criticality. The IEs F, J, and L are consequently realised as the ASN.1 type SEQUENCE OF of "ordinary" ASN.1 type, e.g. INTEGER. On the other hand, the repeatable IEs with assigned criticality are realised as the ASN.1 type SEQUENCE OF of an IE object, e.g. ProtocolIE-Single-Container.

For the corresponding ASN.1 layout, see subclause C.4.

C.2 Example on a Received EXAMPLE MESSAGE

Assume further more that a received message based on the above tabular format is according to the figure below.

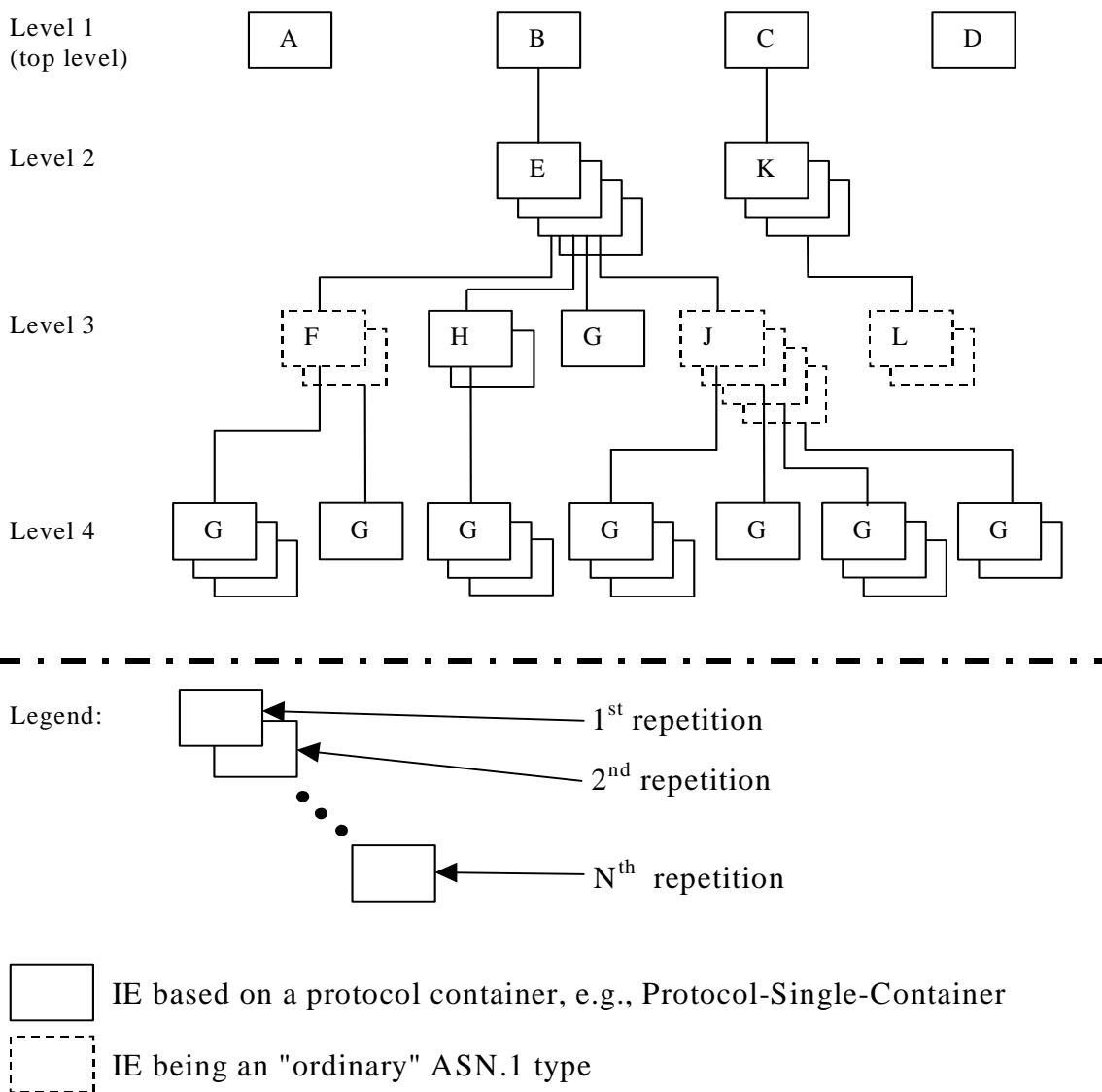
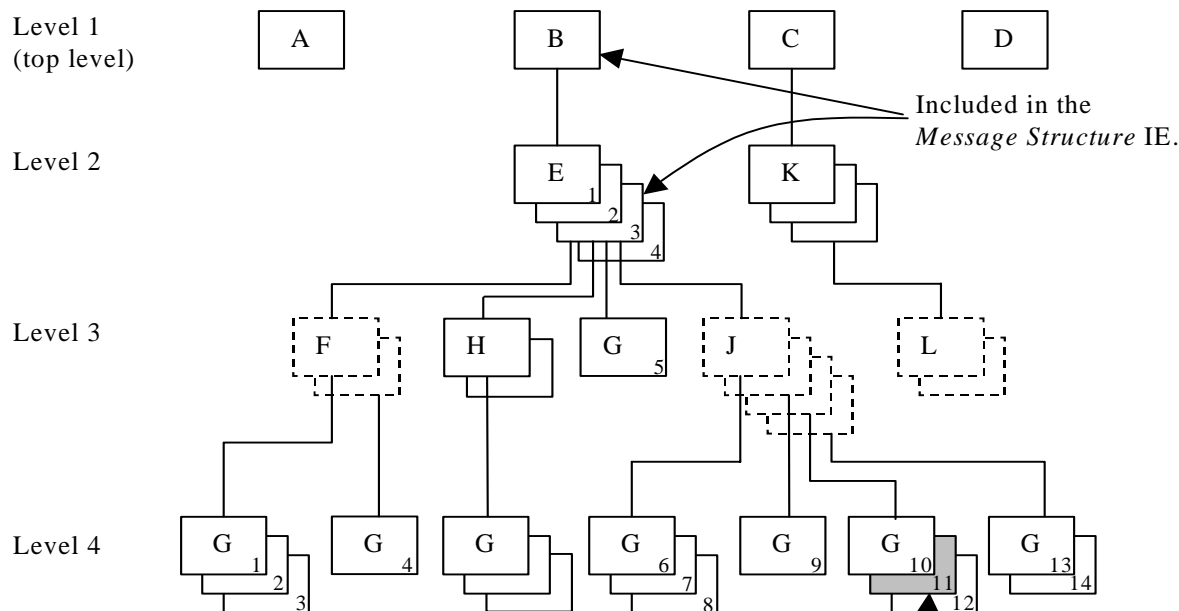


Figure C.1: Example of content of a received NBAP message based on the EXAMPLE MESSAGE

C.3 Content of Criticality Diagnostics

C.3.1 Example 1



Included in the *Information Element Criticality Diagnostics* IE:

- a) *IE ID* IE
- b) *Repetition Number* IE

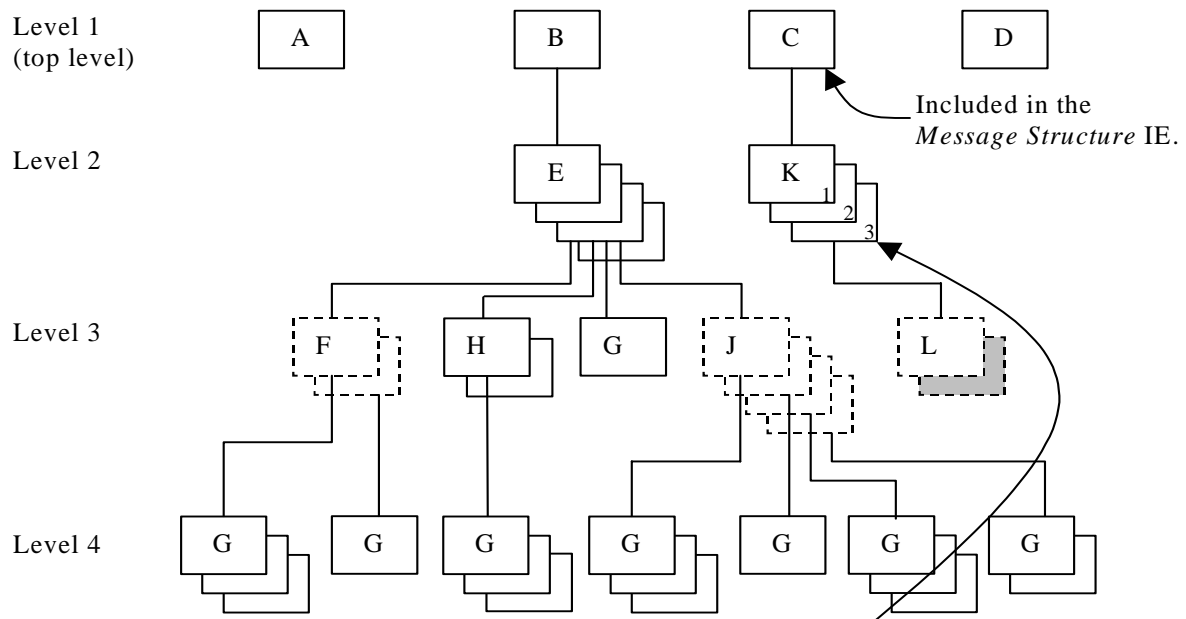
Figure C.2: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE J shown in the figure C.2 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 4.
IE ID	id-G	IE ID from the reported level, i.e. level 4.
Repetition Number	11	Repetition number on the reported level, i.e. level 4. (Since the IE E (level 2) is the lowest level included in the <i>Message Structure</i> IE this is the eleventh occurrence of IE G within the IE E (level 2).)
Type of Error	not understood	
<i>Message Structure, first repetition</i>		
>IE ID	id-B	IE ID from level 1.
<i>Message Structure, second repetition</i>		
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.
>Repetition Number	3	Repetition number from the lowest level above the reported level, i.e. level 2.

- Note 2. The IE J on level 3 cannot be included in the *Message Structure* IE since they have no criticality of their own.
- Note 3. The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

C.3.2 Example 2



Included in the *Information Element Criticality Diagnostics* IE:

- a) *IE ID* IE
- b) *Repetition Number* IE

Figure C.3: Example of a received NBAP message containing a not comprehended IE

If there is an error within the second instance (marked as grey) in the sequence (IE L in the tabular format) on level 3 below IE K in the structure shown in the figure C.3 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	ignore and notify	Criticality for IE on the reported level, i.e. level 2.
IE ID	id-K	IE ID from the reported level, i.e. level 2.
Repetition Number	3	Repetition number on the reported level, i.e. level 2.
Type of Error	not understood	
<i>Message Structure, first repetition</i>		
>IE ID	id-C	IE ID from the lowest level above the reported level, i.e. level 1.

Note 4. The IE L on level 3 cannot be reported individually included in the *Message Structure* IE since it has no criticality of its own.

C.3.3 Example 3

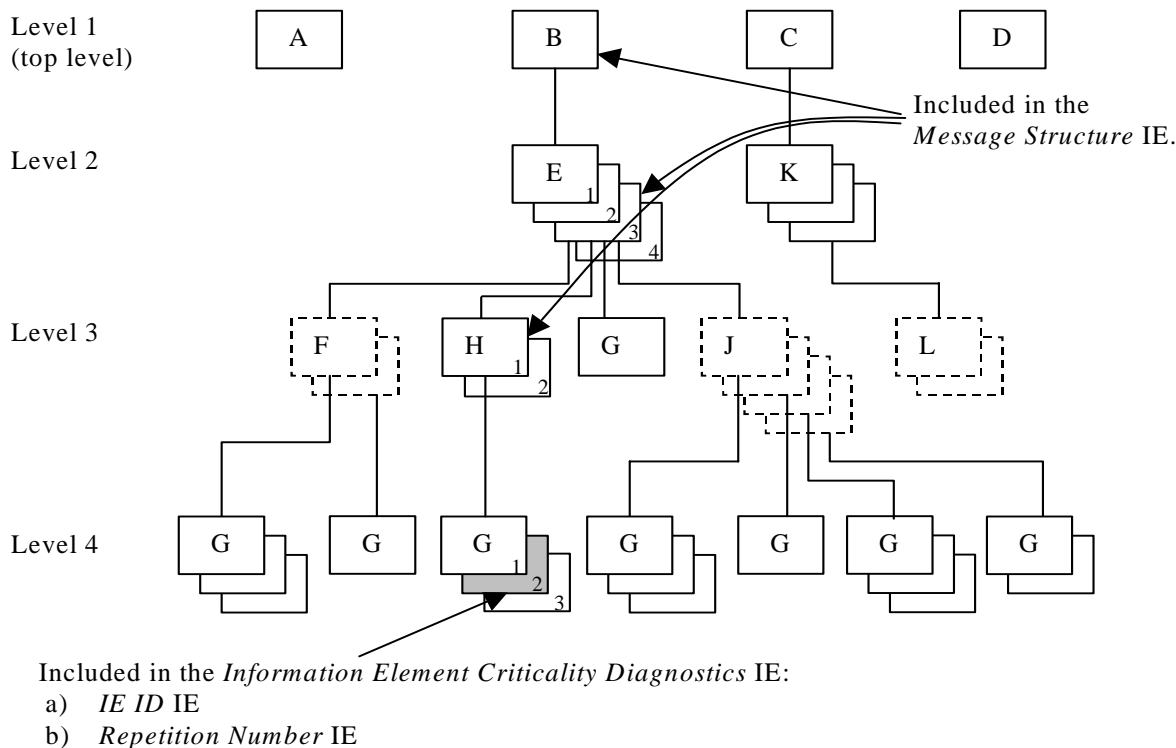


Figure C.4: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE H shown in the figure C.4 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 4.
IE ID	id-G	IE ID from the reported level, i.e. level 4.
Repetition Number	2	Repetition number on the reported level, i.e. level 4.
Type of Error	not understood	
<i>Message Structure, first repetition</i>		
>IE ID	id-B	IE ID from level 1.
<i>Message Structure, second repetition</i>		
>IE ID	id-E	IE ID from level 2.
>Repetition Number	3	Repetition number from level 2.
<i>Message Structure, third repetition</i>		
>IE ID	id-H	IE ID from the lowest level above the reported level, i.e. level 3.
>Repetition Number	1	Repetition number from the lowest level above the reported level, i.e. level 3.

Note 5. The repetition number of level 4 indicates the number of repetitions of IE G received up to the detected erroneous repetition, counted below the same instance of the previous level with assigned criticality (instance 1 of IE H on level 3).

C.3.4 Example 4

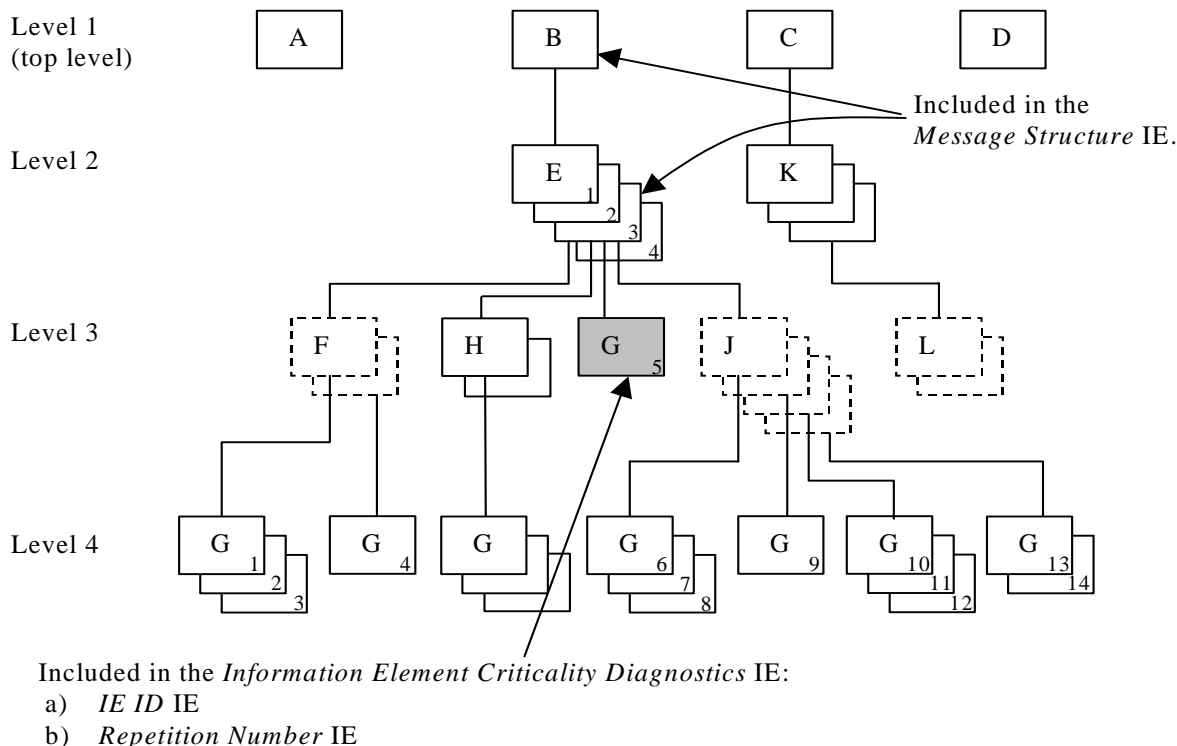


Figure C.5: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE E shown in the figure C.5 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 3.
IE ID	id-G	IE ID from the reported level, i.e. level 3.
Repetition Number	5	Repetition number on the reported level, i.e. level 3. (Since the IE E (level 2) is the lowest level included in the <i>Message Structure</i> IE this is the fifth occurrence of IE G within the IE E (level 2).
Type of Error	not understood	
<i>Message Structure, first repetition</i>		
>IE ID	id-B	IE ID from level 1.
<i>Message Structure, second repetition</i>		
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.
>Repetition Number	3	Repetition number from the lowest level above the reported level, i.e. level 2.

Note 6. The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

C.3.5 Example 5

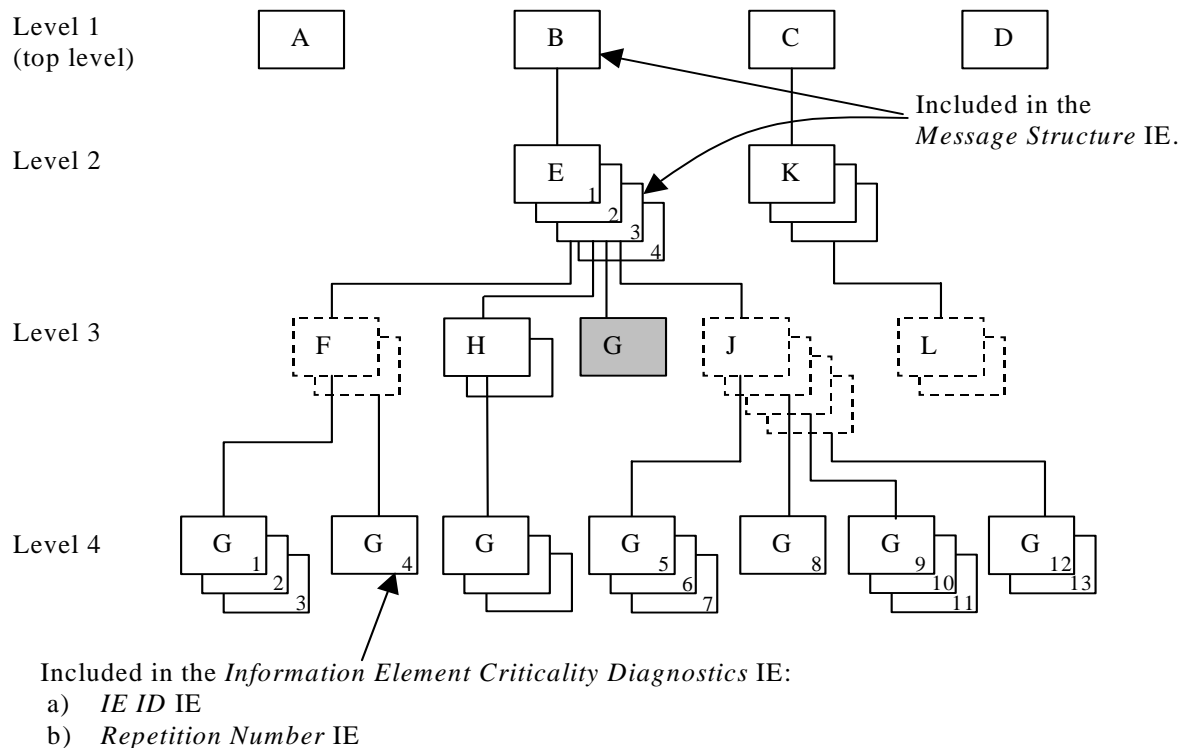


Figure C.6: Example of a received NBAP message with a missing IE

If the instance marked as grey in the IE G in the IE E shown in the figure C.6 above, is missing this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 3.
IE ID	id-G	IE ID from the reported level, i.e. level 3.
Repetition Number	4	Repetition number up to the missing IE on the reported level, i.e. level 3. (Since the IE E (level 2) is the lowest level included in the <i>Message Structure</i> IE there have been four occurrences of IE G within the IE E (level 2) up to the missing occurrence.
Type of Error	missing	
<i>Message Structure, first repetition</i>		
>IE ID	id-B	IE ID from level 1.
<i>Message Structure, second repetition</i>		
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.
>Repetition Number	3	Repetition number from the lowest level above the reported level, i.e. level 2.

Note 7. The repetition number of the reported IE indicates the number of repetitions of IE G received up to but not including the missing occurrence, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

C.4 ASN.1 of EXAMPLE MESSAGE

```

ExampleMessage ::= SEQUENCE {
    ProtocolIEs          ProtocolIE-Container          {{ExampleMessage-IEs}},
    ProtocolExtensions  ProtocolExtensionContainer  {{ExampleMessage-Extensions}}  OPTIONAL,
    ...
}

ExampleMessage-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-A    CRITICALITY reject  TYPE A  PRESENCE mandatory } |
    { ID id-B    CRITICALITY reject  TYPE B  PRESENCE mandatory } |
    { ID id-C    CRITICALITY reject  TYPE C  PRESENCE mandatory } |
    { ID id-D    CRITICALITY reject  TYPE D  PRESENCE mandatory } ,
    ...
}

B ::= SEQUENCE {
    e                E-List,
    iE-Extensions   ProtocolExtensionContainer { {B-ExtIEs} }  OPTIONAL,
    ...
}

B-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

E-List ::= SEQUENCE (SIZE (1..maxE)) OF ProtocolIE-Single-Container { {E-IEs} }

E-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-E    CRITICALITY ignore  TYPE E  PRESENCE mandatory }
}

E ::= SEQUENCE {
    f                F-List,
    h                H-List,
    g                G-List1,
    j                J-List,
    iE-Extensions   ProtocolExtensionContainer { {E-ExtIEs} }  OPTIONAL,
    ...
}

E-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

F-List ::= SEQUENCE (SIZE (1..maxF)) OF F

F ::= SEQUENCE {
    g                G-List2 OPTIONAL,
    iE-Extensions   ProtocolExtensionContainer { {F-ExtIEs} }  OPTIONAL,
    ...
}

F-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

G-List2 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G2-IEs} }

G2-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-G    CRITICALITY ignore  TYPE G  PRESENCE mandatory }
}

H-List ::= SEQUENCE (SIZE (1..maxH)) OF ProtocolIE-Single-Container { {H-IEs} }

H-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-H    CRITICALITY ignore  TYPE H  PRESENCE mandatory }
}

H ::= SEQUENCE {
    g                G-List3 OPTIONAL,
    iE-Extensions   ProtocolExtensionContainer { {H-ExtIEs} }  OPTIONAL,
    ...
}

H-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
G-List3 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G3-IEs} }

G3-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-G    CRITICALITY notify  TYPE G  PRESENCE mandatory }
}

G-List1 ::= ProtocolIE-Single-Container { {G1-IEs} }

G1-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-G    CRITICALITY reject  TYPE G  PRESENCE mandatory }
}

J-List ::= SEQUENCE (SIZE (1..maxJ)) OF J

J ::= SEQUENCE {
  g                G-List4 OPTIONAL,
  iE-Extensions   ProtocolExtensionContainer { {J-ExtIEs} } OPTIONAL,
  ...
}

J-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

G-List4 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G4-IEs} }

G4-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-G    CRITICALITY reject  TYPE G  PRESENCE mandatory }
}

C ::= SEQUENCE {
  k                K-List,
  iE-Extensions   ProtocolExtensionContainer { {C-ExtIEs} } OPTIONAL,
  ...
}

C-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

K-List ::= SEQUENCE (SIZE (1..maxK)) OF ProtocolIE-Single-Container { {K-IEs} }

K-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-K    CRITICALITY notify  TYPE K  PRESENCE mandatory }
}

K ::= SEQUENCE {
  l                L-List,
  iE-Extensions   ProtocolExtensionContainer { {K-ExtIEs} } OPTIONAL,
  ...
}

K-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

L-List ::= SEQUENCE (SIZE (1..maxL)) OF L

L ::= SEQUENCE {
  m                M OPTIONAL,
  iE-Extensions   ProtocolExtensionContainer { {L-ExtIEs} } OPTIONAL,
  ...
}

L-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

ExampleMessage-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

CHANGE REQUEST

⌘ **25.433 CR 670** ⌘ rev **2** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title: ⌘ NBAP Review – Alignment on the ASN.1

Source: ⌘ R-WG3

Work item code: ⌘ TEI

Date: ⌘ May 2002

Category: ⌘ **A**

Release: ⌘ REL-5

Use one of the following categories:

- F** (essential correction)
- A** (corresponds to a correction in an earlier release)
- B** (Addition of feature),
- C** (Functional modification of feature)
- D** (Editorial modification)

Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

- 2** (GSM Phase 2)
- R96** (Release 1996)
- R97** (Release 1997)
- R98** (Release 1998)
- R99** (Release 1999)
- REL-4** (Release 4)
- REL-5** (Release 5)

Reason for change: ⌘ The tabular format is not fully aligned on the ASN.1 description.

Summary of change: ⌘ This CR corrects the tabular format to align it to the ASN.1 specification. This CR also corrects editorial errors in the specification. Below is the list of all the corrections that are not purely editorial.

R2 Corrections (highlighted in light gray):

- subclause 9.2.2.25 (PDSCH Code Mapping): It is indicated that the maximum value of the Code Number is the "Spreading Factor - 1". This handles the particular case where the selected value is "256" as well as all the other cases.
- subclause 9.2.2.42: Alignment to the actual name of the Information Element.
- Alignment of the comments in the ASN.1 to comments on the tabular format for the applicability of Information Elements to a given TDD option.

R1 Corrections (highlighted in light blue):

- "Hysterisis" corrected to "Hysteresis". Applied in the following subclauses: 8.2.8, 8.3.8, New 9.2.1.41A,
- "UTRAN GPS Timing of Cell Frame for LCS" is corrected to "UTRAN GPS Timing of Cell Frames for UE Positioning" which is the accurate name of the measurement according to TSs 25.215 & 25.225. Applied in the following subclauses:
8.2.8, 9.2.1.11, 9.2.1.12, 9.2.1.44, 9.2.1.64A, 9.2.1.64B, 9.2.1.64C
- References to the *Diversity Indication IE* in the procedure text are removed to be in line with the correction removing this IE. Applied in the following subclauses: 8.2.17.2, 8.3.1.2.
- Sentences linking the start of reception on the Uu and the sending of the RADIO LINK SETUP/ADDITION RESPONSE on the lub are removed. A sentence is added to handle when the reception on the Uu should be started. Applied in the

following subclauses:

8.2.17.2, 8.3.1.2.

- A sentence is included to indicate when the Node B shall include the *Communication Control Port Id* IE. Applied in the following subclauses:
8.2.17.3.

- The *Diversity Indication* IE and the corresponding condition are removed from the tabular format. Applied in the following subclauses:
9.1.37.1, 9.1.38.1.

- The *Diversity Indication* IE is removed from the tabular format. Applied in the following subclauses:
9.1.40.1, 9.1.40.2, 9.1.41.1.

9.2.1.26:

The section describing the *Diversity Indication* IE is voided.

9.2.1.31G:

The "..." are replaced by ".." in the INTEGER description.

9.2.1.47A:

The sentence describing the IE is corrected.

9.2.2.53B:

The reference is updated to TS 25.213 ([9]) as only this specification holds details on the alternative scrambling code scheme, not RRC (which is currently referenced).

9.3.3:

- The comment on the "diversityIndication" is removed in the following messages:
 - RADIO LINK SETUP RESPONSE FDD.
 - RADIO LINK SETUP FAILURE FDD
 - RADIO LINK ADDITION RESPONSE FDD
 - RADIO LINK ADDITION RESPONSE TDD
 - RADIO LINK ADDITION FAILURE FDD.

9.3.4:

"uTRAN-GPS-Timing-of-Cell-Frames-for-LCS" is corrected in the Enumeration to "uTRAN-GPS-Timing-of-Cell-Frames-for-UE-Positioning" which is the accurate name of the measurement according to TSs 25.215 & 25.225.

R0 Corrections (highlighted in light blue):

7:

- Clarification for the Common and Dedicated Measurement functions.
- Removal of the usage of the "UE Context" terminology (replaced by "Node B Communication Context").

8.1:

Removal of the usage of the "UE Context" terminology (replaced by "Node B Communication Context").

8.2.1:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to use the name of the IE and to clarify the channels to be configured and activated.

8.2.2:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to use the name of the IE and to clarify the channels to be configured and activated.

8.2.3:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to use the name of the IE and to clarify the

channels to be configured and activated.

8.2.4:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to remove specification text that is handled by the Conditional Presence of the *Shutdown Timer* IE.

8.2.5:

- Clarification of the Port to be used for the procedure.
- The procedure text is changed to reflect the fact that the resource that is unblocked is always a Cell (by means of the *C-ID* IE).

8.2.6:

- Clarification of the Port to be used for the procedure.

8.2.7:

- Clarification of the Port to be used for the procedure.

8.2.8:

- References to the *Common Measurement Object Type* IE in the procedure text are removed to be in line with the correction removing this IE (see 9.1.18 & 9.2.1.10).
- The procedure text is changed to use the proper names of the messages and the IEs that are used.

8.2.9:

- The procedure text is changed to use the proper name of IEs (in this case the *Measurement ID* IE).

8.2.10:

- The procedure text is changed to use the proper name of IEs (in this case the *Measurement ID* IE).

8.2.12:

- Clarification of the Port to be used for the procedure.
- Clarification in the Abnormal Conditions.

8.2.13:

- Clarification of the Port to be used for the procedure.
- Clarification of the IEs used in the Synchronisation Configuration.

8.2.14:

- Clarification of the Port to be used for the procedure.

8.2.15.2:

- Clarification of the Port to be used for the procedure.
- References to the *Indication Type* IE in the procedure text are removed to be in line with the correction removing this IE (see 9.1.32 & 9.2.1.36).

8.2.16:

- Clarification of the Port to be used for the procedure.
- The procedure text for the Unsuccessful Operation is slightly changed.

8.2.17:

- Clarification of the Port to be used for the procedure.
- The procedure text is corrected as DCHs are not added in the Radio Link Setup procedure.
- The procedure text for the RADIO LINK SETUP RESPONSE in the case of combining is changed as the *Reference RL ID* IE does not exist and the *RL ID* IE indicating one RL with which the concerned RL is combined is mandatory in this case
- Usage of the proper terminology "set of co-ordinated DCHs".
- Clarification that the N_OUTSYNC_IND and T_RLFAILURE parameters are used for the out-of-synch algorithm and the N_INSYNCH_IND parameter is used for the in-synch algorithm.
- Removal of redundant text on the beginning of reception of new RLs.

8.2.18:

- Clarification of the Port to be used for the procedure.
- The procedure text is corrected for the case of the PDSCH/PUSCH Deletion.

8.2.26:

- Numbering of the section on Abnormal Conditions is corrected.

8.3.1:

- Clarification of the Port to be used for the procedure.
- The procedure text is corrected to use the name of the IEs that are actually used (in this case *RL ID*, *Transport Layer Address*, *Binding ID*).
- The procedure text for the RADIO LINK ADDITION RESPONSE in the case of combining is changed to reflect the fact that the *RL ID* IE indicates one RL with which the concerned RL is combined.
- Usage of the proper terminology "set of co-ordinated DCHs".
- References to the UE are replaced by Node B Communication Context where applicable.
- Clarification that the N_OUTSYNC_IND and T_RLFAILURE parameters are used for the out-of-synch algorithm and the N_INSYNCH_IND parameter is used for the in-synch algorithm.
- Clarification as to when the Unsuccessful Operation shall be used.
- Appropriate FDD tagging for the case of a "partly" unsuccessful Radio Link Addition.

8.3.2:

- References to the UE are replaced by Node B Communication Context where applicable.
- The procedure text is corrected to use the name of the IEs that are actually used (in this case *Transport Layer Address*, *Binding ID*).

8.3.5:

- Corrections for DCHs that are added and not modified.

8.3.6:

- Clarification of the Port to be used for the procedure.
- Clarification that the N_OUTSYNC_IND and T_RLFAILURE parameters are used for the out-of-synch algorithm and the N_INSYNCH_IND parameter is used for the in-synch algorithm.

8.3.7:

- Clarification of the Port to be used for the procedure.
- References to the UE are replaced by Node B Communication Context where applicable.

8.3.8:

- References to the *Dedicated Measurement Object Type* IE in the procedure text are removed to be in line with the correction removing this IE (see 9.1.52 & 9.2.1.24).
- The procedure text is changed to use the proper names of the messages and IEs that are used.

8.3.9:

- The procedure text is changed to use the proper name of IEs (in this case the *Measurement ID* IE).
- Inclusion of the references to 25.123 and 25.133 (in line with the existing text in the Common Measurement procedures).

8.3.10:

- The procedure text is changed to use the proper name of IEs (in this case the *Measurement ID* IE).

8.3.12:

- Clarification of the Port to be used for the procedure.
- References to the UE are replaced by Node B Communication Context where applicable.

8.3.13:

- Clarification of the Port to be used for the procedure.

8.3.14:

- References to the UE are replaced by Node B Communication Context where applicable.
- Clarification of how the procedure is initiated and which Port is used.

8.3.15:

- Clarification of the Port to be used for the procedure.

8.3.16:

- Clarification of the Port to be used for the procedure.

9.1 General Correction:

Everywhere where applicable the *Transaction ID* IE has been moved just after the *Message Type* IE in the tabular format (for all messages in subclauses from 9.1.36.1 to 9.1.61 included, subclause 9.1.67, subclauses 9.1.87 and 9.1.88). This is in line with the ASN.1 definition where the *Transaction ID* IE is defined as part of the "header" of the message whereas the *Node B Communication Context* IE and/or *CRNC Communication Context* IE are part of the message PDU.

9.1.3.1:

One indentation added to *AICH Parameters* IE. This is an alignment on the ASN.1.

9.1.3.2:

- Criticality of *PCH Power* IE is added (extension due to LCR TDD).
- Criticality Information for *PRACH LCR* IE is set to "GLOBAL".
- Criticality Information for *FPACH* IE is set to "YES".

9.1.17:

- Correction to the reference of the *BCH Information* IE (this is a Transport Channel, not a Physical Channel).
- Font for *DwPCH Information* IE is now standard instead of bold.

9.1.18:

The *Common Measurement Object Type* IE is removed, only the choice remains. This correction is line with the way the Common Measurement Object Type is handled in the COMMON MEASUREMENT INITIATION RESPONSE and COMMON MEASUREMENT REPORT messages.

9.1.19:

Criticality of the "Cell" Choice Tag is corrected from "YES" to "-".

9.1.27.1:

Criticality of the *Secondary CPICH Information* IE is corrected from "YES" to "EACH".

9.1.32:

- *Indication Type* IE is removed, only the choice remains.
- Font for *DwPCH Information* IE is now standard instead of bold.

9.1.36.2:

The *UL SIR Target* IE is moved to the place of extensions in the tabular format (i.e. at the end of the *UL CCTrCH Information* IE).

9.1.42.1:

- The Criticality of the *DSCH To Modify* IE is corrected from "YES" to "EACH".
- The Criticality of the *DSCH To Delete* IE is corrected from "YES" to "EACH".

9.1.42.2:

- The *UL SIR Target* IE is moved to a place in the tabular format that is consistent with the ASN.1 encoding in the following IEs:
 - *UL CCTrCH To Add*,
 - *UL CCTrCH To Modify*.

9.1.51:

The presence of the *DL Reference Power Information* IE is corrected from

"GLOBAL" to "EACH" to be in line with the ASN.1.

9.1.52:

- The *Dedicated Measurement Object Type* IE is removed, only the choice remains. This correction is in line with the way the Dedicated Measurement Object Type is handled in the DEDICATED MEASUREMENT INITIATION RESPONSE and DEDICATED MEASUREMENT REPORT messages.
- The presence of the *PUSCH Information* IE is corrected from "EACH" to "GLOBAL" to be in line with the ASN.1.

9.1.53:

- The *PUSCH Information* IE is moved to the place of extensions in the tabular format (i.e. at the end of the RL Information IE).
- Criticality of the *PUSCH Information* IE is corrected from "EACH" to "GLOBAL".
- The presence of the *RL Set Information* IE has been corrected from "-" to "EACH/ignore" to be in line with the ASN.1 specification.

9.1.55:

- The *PUSCH Information* IE is moved to the place of extensions in the tabular format (i.e. at the end of the RL Information IE).
- Criticality of the *PUSCH Information* IE is corrected from "EACH" to "GLOBAL".

9.1.58:

The Criticality of the CCTrCH choice tag is corrected from " " to "-".

9.1.59:

- Criticality of the CCTrCH choice tag is corrected from " " to "-".
- Criticality of the *RL Id* IE in the CCTrCH choice tag is corrected from " " to "-".

9.1.62:

- Criticality of the *DL Timeslot Information LCR* IE in *PDSCH To Add Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Criticality of the *DL Code Information LCR* IE in *PDSCH To Add Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Criticality of the *DL Timeslot Information LCR* IE in *PDSCH To Modify Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Criticality of the *Midamble Shift LCR* IE in *PDSCH To Modify Information LCR* IE is corrected from " " to "-".
- Maximum for the sequence in *DL Code Information LCR* IE in *PDSCH To Modify Information LCR* IE is corrected from "maxnoofPDSCHsLCR" to "maxnoofPDSCHs". (in line with the ASN.1 where there is no maxNrofPDSCHsLCR).
- Criticality of the *DL Code Information LCR* IE in *PDSCH To Modify Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Criticality of the *UL Timeslot Information LCR* IE in *PUSCH To Add Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Criticality of the *Midamble Shift LCR* IE in the *PUSCH To Add Information LCR* IE is corrected from " " to "-".
- Maximum for the sequence in *UL Code Information LCR* IE in *PUSCH To Add Information LCR* IE is corrected from "maxnoofPUSCHsLCR" to "maxnoofPUSCHs". (in line with the ASN.1 where there is no maxNrofPUSCHsLCR).
- Criticality of the *UL Code Information LCR* IE in *PUSCH To Add Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Maximum for the sequence in *UL Code Information* IE in *PUSCH To Modify Information* IE is corrected from "maxnoofPDSCHs" to "maxnoofPUSCHs".
- Criticality of the *UL Timeslot Information LCR* IE in *PUSCH To Modify Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- Criticality of the *Midamble Shift LCR* IE in *PUSCH To Modify Information LCR* IE is corrected from " " to "-".
- Maximum for the sequence in *UL Code Information LCR* IE in *PUSCH To Modify Information LCR* IE is corrected from "maxnoofPDSCHsLCR" to "maxnoofPUSCHs". (the ASN.1 needs also to be corrected see comments on 9.3.3).

- Criticality of the *UL Code Information LCR* IE in *PUSCH To Modify Information LCR* IE is corrected from "GLOBAL/reject" to "-".
- In the table defining the different maximum constants used:
 - maxnoofPDSCHsLCR is removed.
 - maxnoofPUSCHsLCR is removed.
 - maxnoofDLtsLCR is added.

9.1.64:

The Criticality of the *Cause* IE in *Unsuccessful DL Shared Channel Set* IE is corrected from "YES/ignore" to "-".

9.1.68:

Addition of the *Message Discriminator* IE.

9.1.69:

The *Information Exchange Object Type* IE is removed (consistent with Measurement procedures).

9.1.84:

Criticality of *Message Type* IE changed to "reject" according to the ASN.1 (see § 9.3.2).

9.1.85:

Criticality of *Message Type* IE changed to "reject" according to the ASN.1 (see § 9.3.2).

9.1.86:

Criticality of *Message Type* IE changed to "reject" according to the ASN.1 (see § 9.3.2).

9.2.1.1A:

The explanation of the meaning of the values of the *Priority Level* IE is moved to the Semantics Description column.

9.2.1.6:

In the "Radio Network Layer Cause Meaning" table, the row for "Cell Synchronisation Adjustment not supported" is moved to its rightful place in the alphabetical order.

9.2.1.10:

This subclause on "Common Measurement Object Type" becomes "Void" according to the correction in 9.1.18.

9.2.1.12:

The tabular format is modified to introduce a "Criticality" and an "Assigned Criticality" column for the last 2 measurements that were introduced in an extension container and thus have a criticality (cf. in Rel-4) as well as provide a better representation of the use of the Extension solution for the Choices (see Issues to be solved on this topic).

9.2.1.17:

- The *DdMode* IE is reordered and made extensible according to the ASN.1 definition in 9.3.5.
- The tabular format is modified to introduce a "Criticality" and an "Assigned Criticality" column for the last 2 IEs that were introduced in an extension container and thus have a criticality (cf. late R99 corrections).

New 9.2.1.18A:

The tabular format introduced for the *CTFC* IE is in line with the ASN.1 definition in 9.3.5.

9.2.1.22:

This subclause on "Dedicated Measurement Object Type" becomes "Void" according to the correction in 9.1.52.

9.2.1.24:

The tabular format is modified to introduce a "Criticality" and an "Assigned Criticality" column for the last 2 measurements that were introduced in an

extension container and thus have a criticality (cf. in Rel-4) as well as provide a better representation of the use of the Extension solution for the Choices (see Issues to be solved on this topic).

9.2.1.36:

This subclause on "Indication Type" becomes "Void" according to the correction in 9.1.32, 9.3.3 and 9.3.4).

9.2.1.36A:

This subclause on "Information Exchange Object Type" becomes "Void" according to the correction in 9.1.69.

9.2.1.36B:

The tabular format definition of the *Information Report Periodicity* IE is corrected to indicate that this is a CHOICE between INTEGER (1..60,...) and INTEGER (1..24,...).

9.2.1.39:

Definition is corrected from ENUMERATED to INTEGER (in line with the ASN.1).

9.2.1.40:

Definition is corrected from ENUMERATED to INTEGER (in line with the ASN.1).

9.2.1.40A:

This subclause on "Measurement Availability Indicator" becomes "Void" as this IE is not used anywhere in the specification.

New 9.2.1.40B:

The *Measurement Change Time* IE is defined as a CHOICE between INTEGER (1..6000,...) and nothing according to the ASN.1 definition in 9.3.5.

New 9.2.1.41A:

The *Measurement Hysteresis Time* IE is defined as a CHOICE between INTEGER (1..6000,...) and nothing according to the ASN.1 definition in 9.3.5.

9.2.1.44:

The tabular format is modified to introduce a "Criticality" and an "Assigned Criticality" column for the last 2 measurements that were introduced in an extension container and thus have a criticality (cf. in Rel-4).

9.2.1.45A:

The table has been corrected to remove the "Criticality" and "Assigned Criticality" columns to be in line with the ASN.1 definition (the IE is not defined by a ProtocolIE-Single-Container, but only as part of an extension to the Criticality Diagnostics IE).

9.2.1.46:

The *DdMode* IE is reordered and made extensible according to the ASN.1 definition in 9.3.5.

9.2.1.46A:

The ENUMERATED is corrected into an INTEGER according to the ASN.1 definition in 9.3.5.

9.2.1.49:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.1.49A:

The ENUMERATED is corrected into an INTEGER according to the ASN.1 definition in 9.3.5 (some text is added to the Semantics Description).

9.2.1.51:

- The tabular format definition of the *Report Periodicity* IE is changed to a reference to the newly introduced subclause 9.2.1.51a in order to present a definition in line with the ASN.1 definition (i.e. CHOICE between INTEGER (1..6000,...) and INTEGER (1..60,...), see 9.3.5).
- The tabular format definition of the *Measurement Hysteresis Time* IE is changed to a reference to the newly introduced subclause 9.2.1.41B in order to present a definition in line with the ASN.1 definition (i.e. CHOICE between

INTEGER (1..6000,...) and nothing, see 9.3.5).

- The tabular format definition of the *Measurement Change Time* IE is changed to a reference to the newly introduced subclause 9.2.1.40A in order to present a definition in line with the ASN.1 definition (i.e. CHOICE between INTEGER (1..6000,...) and nothing, see 9.3.5).

- The tabular format is modified to introduce a "Criticality" and an "Assigned Criticality" column for the last Reporting Type that was introduced in an extension container and thus has a criticality (cf. in Rel-4) as well as provide a better representation of the use of the Extension solution for the Choices (see Issues to be solved on this topic).

New 9.2.1.51a:

The *Report Periodicity* IE is defined as a CHOICE between INTEGER (1..6000,...) and INTEGER (1..60,...) according to the ASN.1 definition in 9.3.5.

9.2.1.56A:

Alignment to the ASN.1 definition (Integer (0..255)).

9.2.1.58:

- The *CTFC* IE is encoded differently in the ASN.1 than by a mere INTEGER (0..MaxCTFC), this is aligned by replacing the definition by a reference to a new section 9.2.1.18A. Every piece of text related to this IE is moved to that section.
- Presence (M) of the "CHOICE Mode" is added.

9.2.1.62:

Tabular format structure is modified to be in line with the ASN.1 encoding.

9.2.2.16A:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.18C:

The ENUMERATED defining the *IP SpacingFDD* IE is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.22:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.24:

This section is voided as there is no corresponding IE defined in the tabular format in 9.2 or in the ASN.1 in 9.3.

9.2.2.25:

- The definition of the *DL Scrambling Code* IE is replaced by a reference to the subclause in which this IE is defined (9.2.2.13).
- The ENUMERATED defining the *Spreading Factor* IEs (4 different places in the *PDSCH Code Mapping* IE) is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.26:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.48:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.2.53B:

The name of the IE in the tabular format is aligned to the IE Name in the subclause title in 9.3.5.

9.2.3.4D:

Tabular format structure is modified to be in line with the ASN.1 encoding in 9.3.5: the IE is not defined using the ProtocolIE-Single-Container, so it has no Criticality in itself => the "Criticality" and the "Assigned Criticality" columns are removed.

9.2.3.4L:

Tabular format structure is modified to be in line with the ASN.1 encoding in 9.3.5.

9.2.3.5B:

Definition of the IE is corrected to be in line with the ASN.1 definition in 9.3.5.

(INTEGER(-150,..400,...))

9.2.3.5E:

Definition of the IE is corrected to be in line with the ASN.1 definition in 9.3.5.
(INTEGER(-150,..400,...))

9.2.3.7:

Tabular format structure is modified to be in line with the ASN.1 encoding in 9.3.5.

9.2.3.7A:

The ENUMERATED defining the *Midamble Allocation Mode* IE is made extensible according to the ASN.1 definition in 9.3.5.

9.2.3.9:

Definition of the IE is corrected to be in line with the ASN.1 definition in 9.3.5.
(INTEGER(-150,..400,...)).

9.2.3.14:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.3.16:

The ENUMERATED is made extensible according to the ASN.1 definition in 9.3.5.

9.2.3.19A:

Tabular format structure is modified to be in line with the ASN.1 encoding in 9.3.5.

9.2.3.22a:

Tabular format structure is modified to be in line with the ASN.1 encoding in 9.3.5.

9.2.3.26:

A comment is added in the Semantics Description column, in line with the Comment in the ASN.1.

9.3.3:

- In the "Imports", the "IndicationType" is removed as it is not used anywhere in this part of the ASN.1. (see also correction in 9.1.32, 9.2.1.36 and 9.3.4).
- In COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST TDD message, the comment on the following IEs in the extension is corrected to reflect that these are LCR TDD IEs, not HCR TDD IEs:
 - id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD,
 - id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD,
 - id-PCH-Power-LCR-CTCH-ReconfRqstTDD.
- In COMMON MEASUREMENT INITIATION REQUEST message:
 - The comment on the "CommonMeasurementObjectType-CM-Rqst" is removed (in line with the correction in 9.1.18).
- In RESOURCE STATUS INDICATION message:
 - The comment on the "IndicationType-ResourceStatusInd" is removed (in line with the correction in 9.1.32).
- In RADIO LINK ADDITION REQUEST TDD message:
 - A comment is added to indicate that "uL-DPCH-Information" is "for 3.84Mcps TDD only" (consistent with tabular format).
- In RADIO LINK RECONFIGURATION PREPARE TDD message:
 - Addition of a comment to indicate that the USCH for TDD only.
- In DEDICATED MEASUREMENT INITIATION REQUEST message:
 - The comment on the "DedicatedMeasurementObjectType-CM-Rqst" is removed (in line with the correction in 9.1.52).
 - A comment is added to indicate that "RLS" and "AllRLS" choices are "For FDD only".
 - A comment is added to indicate that "DPCH-Id" is "For TDD only".
- In DEDICATED MEASUREMENT INITIATION RESPONSE message:
 - A comment is added to indicate that "RLS" and "AllRLS" choices are "For FDD only".

- A comment is added to indicated that "DPCH-Id" is "For TDD only".
- In DEDICATED MEASUREMENT INITIATION RESPONSE message:
 - A comment is added to indicate that "RLS" and "AllRLS" choices are "For FDD only".
 - A comment is added to indicated that "DPCH-Id" is "For TDD only".
- In PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message:
 - The comment "mandatory for 3.84Mcps TDD only" for "PUSCH-Information-AddList-PSCH-ReconfRqst" is moved.
 - The comment "mandatory for 3.84Mcps TDD only" for "PUSCH-Information-ModifyList-PSCH-ReconfRqst" is moved.
- In INFORMATION EXCHANGE INITIATION REQUEST message:
 - The comment on the "InformationExchangeObjectType-InfEx-Rqst" is removed (in line with the correction in 9.1.69)

9.3.4:

- Acknowledged-PCPCH-access-preambles:
 - A comment is added in line with the one in the tabular format.
- Acknowledged-PRACH-preambles-Value:
 - The comment is aligned on the one in the tabular format to remove text present in another specification (i.e. use of the referenced specification).
- CauseRadioNetwork:
 - "synchronisation-adjustment-not-supported" is corrected "cell-synchronisation-adjustment-not-supported" (editorial alignment on the tabular format).
- CommonTransportChannel-InformationResponse:
 - This IE and its definition are moved from the "R" section to the "C" section.
- Compressed-Mode-Deactivation-Flag:
 - The comment is removed as it does not have any meaning anymore.
- Detected-PCPCH-access-preambles:
 - A comment is added in line with the one in the tabular format.
- GPS-Information:
 - The comment including the condition for the presence of the GPS-Information is removed (see correction on InformationType).
- IndicationType:
 - This IE is removed as it is not used anywhere in the ASN.1. (see also correction in 9.1.32, 9.2.1.36 and 9.3.3).
- InformationType:
 - A comment is added including the condition for the presence of the GPS-Information.
- LimitedPowerIncrease:
 - This IE and its definition are moved from the "R" section to the "L" section.
- MessageStructure:
 - This IE and its definition are moved from the "C" section to the "M" section.
- MidambleShiftLCR:
 - A comment is added including the condition for the presence of the midambleShift IE.
- Rx-Timing-Deviation-Value:
 - A comment is added in line with the one in the tabular format.
- Rx-Timing-Deviation-Value-LCR:
 - A comment is added in line with the one in the tabular format.
- TFCS-TFCSList (in TFCS):

- A comment is added in line with the condition in the tabular format.
- Transmitted-Carrier-Power-Value:
 - The references in the comment are updated from [4]/[5] to [22]/[23].
- Transmitted-Code-Power-Value:
 - The references in the comment are updated from [4]/[5] to [22]/[23].

Impact Analysis:

Impact assessment towards the previous version of the specification (same release): this CR has no impact on the previous version of the specification (same release) under either the protocol or functional point of view as the ASN.1 takes precedence on the tabular format and this CR merely aligns the tabular format on the ASN.1.

Consequences if not approved: ☹ If this CR is not approved, then the discrepancy between the tabular format and the ASN.1 will remain.

Clauses affected: ☹ All except cover page, 1, 2 and Annex D. This includes the introduction of new subclauses 9.2.1.18A, 9.2.1.40B, 9.2.1.41A, 9.2.1.51a.

Other specs affected:	☹ <input checked="" type="checkbox"/>	Other core specifications	☹ TS 25.433 v 3.9.0 CR 668
	☹ <input type="checkbox"/>	Test specifications	TS 25.433 v 4.4.0 CR 669
	☹ <input type="checkbox"/>	O&M Specifications	

Other comments: ☹

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ☹ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. – In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TS 25.401: "UTRAN Overall Description".
- [2] 3GPP TS 25.426: "UTRAN Iur and Iub Interface Data Transport & Transport Signalling for DCH Data Streams".
- [3] CCITT Recommendation X.731 (01/92): "Information Technology – Open Systems Interconnection – Systems Management: State Management function".
- [4] 3GPP TS 25.215: "Physical layer – Measurements (FDD)".
- [5] 3GPP TS 25.225: "Physical layer – Measurements (TDD)".
- [6] 3GPP TS 25.430: "UTRAN Iub General Aspect and Principle".
- [7] 3GPP TS 25.211: "Physical channels and mapping of transport channels onto physical channels (FDD)".
- [8] 3GPP TS 25.212: "Multiplexing and channel coding (FDD)".
- [9] 3GPP TS 25.213: "Spreading and modulation (FDD)".
- [10] 3GPP TS 25.214: "Physical layer procedures (FDD)".
- [11] ITU-T Recommendation X.691, (12/97) "Information technology - ASN.1 encoding rules - Specification of Packed Encoding Rules (PER)".
- [12] ITU-T Recommendation X.680, (12/97) "Information Technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation".
- [13] ITU-T Recommendation X.681, (12/97) "Information Technology - Abstract Syntax Notation One (ASN.1): Information object specification".
- [14] 3GPP TS 25.104: "UTRA (BS) FDD; Radio Transmission and Reception".
- [15] 3GPP TS 25.105: "UTRA (BS) TDD; Radio Transmission and Reception".
- [16] 3GPP TS 25.427: "UTRAN Iur/Iub Interface User Plane Protocol for DCH Data Stream"^[22].
- [17] 3GPP TS 25.402: "Synchronisation in UTRAN Stage2"^[22].
- [18] 3GPP TS 25.331: "RRC Protocol Specification"^[22].
- [19] 3GPP TS 25.221: "Physical channels and mapping of transport channels onto physical channels [TDD]"^[22].
- [20] 3GPP TS 25.223: "Spreading and modulation (TDD)"^[22].
- [21] 3GPP TS 25.224: "Physical Layer Procedures (TDD)"^[22].
- [22] 3GPP TS 25.133 (V3.3): "Requirements for support of Radio Resource management (FDD)"^[22].

- [23] 3GPP TS 25.123 (V4.0): "-Requirements for support of Radio Resource management (TDD)".
- [24] 3GPP TS 25.435: "UTRAN Iub Interface: User Plane Protocols for Common Transport Channel Data Streams".
- [25] 3GPP TS 25.302: "Services Provided by the Physical Layer".
- [26] 3GPP TR 25.921: "Guidelines and Principles for Protocol Description and Error Handling".
- [27] ICD-GPS-200: "Navstar GPS Space Segment/Navigation User Interface".
- [28] RTCM-SC104: "RTCM Recommended Standards for Differential GNSS Service (v.2.2)".
- [29] IETF RFC 2460 "Internet Protocol, Version 6 (IPv6) Specification".
- [30] IETF RFC 768 "User Datagram Protocol", (8/1980)
- [31] 3GPP TS 25.434: "-UTRAN Iub Interface Data Transport & Transport Signalling for Common Transport Channel Data Streams-".

3 Definitions, Symbols and Abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply.

CRNC Communication Context: The CRNC Communication Context contains the necessary information for the CRNC for communication with a specific UE. The CRNC Communication Context is identified by the CRNC Communication Context ID.

Elementary Procedure: The NBAP protocol consists of Elementary Procedures (EPs). An Elementary Procedure is a unit of interaction between the CRNC and the Node B.

An EP consists of an initiating message and possibly a response message.

Two kinds of EPs are used:

- **Class 1:** Elementary Procedures with response (success or failure).
- **Class 2:** Elementary Procedures without response.

For **Class 1** EPs, the types of responses can be as follows:

Successful

- A signalling message explicitly indicates that the elementary procedure has been successfully completed with the receipt of the response.

Unsuccessful

- A signalling message explicitly indicates that the EP failed.

Class 2 EPs are considered always successful.

Node B Communication Context: The Node B Communication Context contains the necessary information for the Node B for communication with a specific UE. The Node B Communication Context is created by the Radio Link Setup procedure and deleted by the Radio Link Deletion procedure when deleting the last Radio Link within the Node B Communication Context. The Node B Communication Context is identified by the Node B Communication Context ID.

Prepared Reconfiguration: A Prepared Reconfiguration exists when the Synchronised Radio Link Reconfiguration Preparation procedure has been completed successfully. The Prepared Reconfiguration does not exist any more after either of the procedures Synchronised Radio Link Reconfiguration Commit or Synchronised Radio Link Reconfiguration Cancellation has been completed.

3.2 Symbols

Void.

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

A-GPS	Assisted GPS
AICH	Acquisition Indicator Channel
ALCAP	Access Link Control Application Part
AP-AICH	Access Preamble Acquisition Indicator Channel
ASN.1	Abstract Syntax Notation One
BCCH	Broadcast Control Channel
CCPCH	Common Control Physical Channel
CFN	Connection Frame Number
CM	Compressed Mode
CPCH	Common Packet Channel
CPICH	Common Pilot Channel
CRNC	Controlling Radio Network Controller
CSICH	CPCH Status Indicator Channel
DCH	Dedicated Channel
DGPS	Differential GPS
DL	Downlink
DPCCH	Dedicated Physical Control Channel
DPCH	Dedicated Physical Channel
DPDCH	Dedicated Physical Data Channel
DSCH	Downlink Shared Channel
FACH	Forward Access Channel
FDD	Frequency Division Duplex
FP	Frame Protocol
GPS	Global Positioning System
HS-DSCH	High Speed Downlink Shared Channel
HS-PDSCH	High Speed Physical Downlink Shared Channel
HS-SCCH	High Speed Shared Control Channel
HS-SICH	High Speed Shared Information Channel
IP	Internet Protocol
IPDL	Idle Periods in the DownLink
ISCP	Interference Signal Code Power
L1	Layer 1
L2	Layer 2
MIB	Master Information Block
NBAP	Node B Application Part
O&M	Operation and Maintenance
PCCPCH	Primary Common Control Physical Channel
PCH	Paging Channel
PCPCH	Physical Common Packet Channel
PDSCH	Physical Downlink Shared Channel
PICH	Paging Indication Channel
PUSCH	Physical Uplink Shared Channel
RACH	Random Access Channel
RL	Radio Link
RLS	Radio Link Set
RNC	Radio Network Controller
RRC	Radio Resource Control
SB	Scheduling Block
SCCPCH	Secondary Common Control Physical Channel
SCH	Synchronisation Channel
SCTD	Space Code Transmit Diversity
SIB	System Information Block
SRNC	Serving Radio Network Controller

SSDT	Site Selection Diversity Transmission
STTD	Space Time Transmit Diversity
TDD	Time Division Duplex
TFC	Transport Format Combination
TFCI	Transport Format Combination Indicator
TFCS	Transport Format Combination Set
TFS	Transport Format Set
TPC	Transmit Power Control
TSTD	Time Switched Transmit Diversity
UARFCN	UTRA Absolute Radio Frequency Channel Number
UDP	User Datagram Protocol
UE	User Equipment
UL	Uplink
UMTS	Universal Mobile Telecommunications System
USCH	Uplink Shared Channel
UTRA	Universal Terrestrial Radio Access
UTRAN	Universal Terrestrial Radio Access Network

4 General

4.1 Procedure Specification Principles

The principle for specifying the procedure logic is to specify the functional behaviour of the Node B exactly and completely. The CRNC functional behaviour is left unspecified. The Reset procedure is an exception from this principle.

The following specification principles have been applied for the procedure text in subclause 8:

— The procedure text discriminates between:

1) Functionality which "shall" be executed

The procedure text indicates that the receiving node "shall" perform a certain function Y under a certain condition. If the receiving node supports procedure X but cannot perform functionality Y requested in the REQUEST message of a Class 1 EP, the receiving node shall respond with the message used to report unsuccessful outcome for this procedure, containing an appropriate cause value.

2) Functionality which "shall, if supported" be executed

The procedure text indicates that the receiving node "shall, if supported," perform a certain function Y under a certain condition. If the receiving node supports procedure X, but does not support functionality Y, the receiving node shall proceed with the execution of the EP, possibly informing the requesting node about the not supported functionality.

- Any required inclusion of an optional IE in a response message is explicitly indicated in the procedure text. If the procedure text does not explicitly indicate that an optional IE shall be included in a response message, the optional IE shall not be included.

4.2 Forwards and Backwards Compatibility

The forwards and backwards compatibility of the protocol is assured by a mechanism where all current and future messages, and IEs or groups of related IEs, include Id and criticality fields that are coded in a standard format that will not be changed in the future. These parts can always be decoded regardless of the standard version.

4.3 Specification Notations

For the purposes of the present document, the following notations apply:

- [FDD] This tagging of a word indicates that the word preceding the tag "[FDD]" applies only to FDD. This tagging of a heading indicates that the heading preceding the tag "[FDD]" and the section following the heading applies only to FDD.
- [TDD] This tagging of a word indicates that the word preceding the tag "[TDD]" applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[TDD]" and the section following the heading applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD.
- [3.84Mcps TDD] This tagging of a word indicates that the word preceding the tag "[3.84Mcps TDD]" applies only to 3.84Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[3.84Mcps TDD]" and the section following the heading applies only to 3.84Mcps TDD.
- [1.28Mcps TDD] This tagging of a word indicates that the word preceding the tag "[1.28Mcps TDD]" applies only to 1.28Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[1.28Mcps TDD]" and the section following the heading applies only to 1.28Mcps TDD.
- [FDD - ...] This tagging indicates that the enclosed text following the "[FDD - " applies only to FDD. Multiple sequential paragraphs applying only to FDD are enclosed separately to enable insertion of TDD specific (or common) paragraphs between the FDD specific paragraphs.
- [TDD - ...] This tagging indicates that the enclosed text following the "[TDD - " applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD. Multiple sequential paragraphs applying only to TDD are enclosed separately to enable insertion of FDD specific (or common) paragraphs between the TDD specific paragraphs.
- [3.84Mcps TDD - ...] This tagging indicates that the enclosed text following the "[3.84Mcps TDD - " applies only to 3.84Mcps TDD. Multiple sequential paragraphs applying only to 1.28Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common) paragraphs between the 3.84Mcps TDD specific paragraphs.
- [1.28Mcps TDD - ...] This tagging indicates that the enclosed text following the "[1.28Mcps TDD - " applies only to 1.28Mcps TDD. Multiple sequential paragraphs applying only to 1.28Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common) paragraphs between the 1.28Mcps TDD specific paragraphs.
- Procedure When referring to an elementary procedure in the specification the Procedure Name is written with the first letters in each word in upper case characters followed by the word-_"procedure", e.g. Radio Link Setup procedure.
- Message When referring to a message in the specification the MESSAGE NAME is written with all letters in upper case characters followed by the word-_"message", e.g. RADIO LINK SETUP REQUEST message.
- IE When referring to an information element (IE) in the specification the *Information Element Name* is written with the first letters in each word in upper case characters and all letters in Italic font followed by the abbreviation-_"IE", e.g. *Transport Format Set IE*.
- Value of an IE When referring to the value of an information element (IE) in the specification the "Value" is written as it is specified in subclause 9.2 enclosed by quotation marks, e.g. "Abstract Syntax Error (Reject)" or "SSDT Active in the UE".

5 NBAP Services

5.1 Parallel Transactions

Unless explicitly indicated in the procedure description, at any instance in time one protocol peer shall have a maximum of one ongoing dedicated NBAP procedure related to a certain Node B eCcommunication eContext.

6 Services Expected from Signalling Transport

NBAP requires an assured in-sequence delivery service from the signalling bearer, and notification if the assured in-sequence delivery service is no longer available.

7 Functions of NBAP

The NBAP protocol provides the following functions:

- Cell Configuration Management. This function gives the CRNC the possibility to manage the cell configuration information in a Node B.
- Common Transport Channel Management. This function gives the CRNC the possibility to manage the configuration of Common Transport Channels in a Node B.
- System Information Management. This function gives the CRNC the ability to manage the scheduling of System Information to be broadcast in a cell.
- Resource Event Management. This function gives the Node B the ability to inform the CRNC about the status of Node B resources.
- Configuration Alignment. This function gives the CRNC and the Node B the possibility to verify and enforce that both nodes have the same information on the configuration of the radio resources.
- Measurements on Common Resources. This function allows the CRNC to initiate measurements **on common resources** in the Node B. The function also allows the Node B to report the result of the measurements.
- Radio Link Management. This function allows the CRNC to manage radio links using dedicated resources in a Node B.
- Radio Link Supervision. This function allows the CRNC to report failures and restorations of a Radio Link.
- Compressed Mode Control [FDD]. This function allows the CRNC to control the usage of compressed mode in a Node B.
- Measurements on Dedicated Resources. This function allows the CRNC to initiate measurements **on dedicated resources** in the Node B. The function also allows the Node B to report the result of the measurements.
- DL Power Drifting Correction [FDD]. This function allows the CRNC to adjust the DL power level of one or more Radio Links in order to avoid DL power drifting between the Radio Links.
- Reporting of General Error Situations. This function allows reporting of general error situations, for which function specific error messages have not been defined.
- Physical Shared Channel Management. This function allows the CRNC to manage physical resources in the Node B belonging to High Speed Downlink Shared Channels and High Speed Shared Control Channels [TDD – and High Speed Shared Indication Channels and Shared Channels (USCH/DSCH)].
- DL Power Timeslot Correction [TDD]. This function enables the Node B to apply an individual offset to the transmission power in each timeslot according to the downlink interference level at the UE.
- Cell Synchronisation [TDD]. This function allows the synchronisation of cells or Node Bs via the air interface.

- Information Exchange. This function allows the CRNC to initiate information provision from the Node B. The function also allows the Node B to report the requested information.
- Bearer Rearrangement. This function allows the Node B to indicate the need for bearer re-arrangement for a UE Node B Communication eContext. The function also allows the CRNC to re-arrange bearers for a UE Node B Communication eContext.

The mapping between the above functions and NBAP elementary procedures is shown in the table below.

Table 1: Mapping between functions and NBAP elementary procedures

Function	Elementary Procedure(s)
Cell Configuration Management	a) Cell Setup b) Cell Reconfiguration c) Cell Deletion
Common Transport Channel Management	a) Common Transport Channel Setup b) Common Transport Channel Reconfiguration c) Common Transport Channel Deletion
System Information Management	System Information Update
Resource Event Management	a) Block Resource b) Unblock Resource c) Resource Status Indication
Configuration Alignment	a) Audit Required b) Audit c) Reset
Measurements on Common Resources	a) Common Measurement Initiation b) Common Measurement Reporting c) Common Measurement Termination d) Common Measurement Failure
Radio Link Management.	a) Radio Link Setup b) Radio Link Addition c) Radio Link Deletion d) Unsynchronised Radio Link Reconfiguration e) Synchronised Radio Link Reconfiguration Preparation f) Synchronised Radio Link Reconfiguration Commit g) Synchronised Radio Link Reconfiguration Cancellation h) Radio Link Pre-emption
Radio Link Supervision.	a) Radio Link Failure b) Radio Link Restoration
Compressed Mode Control [FDD]	a) Radio Link Setup b) Radio Link Addition c) Compressed Mode Command d) Unsynchronised Radio Link Reconfiguration e) Synchronised Radio Link Reconfiguration Preparation f) Synchronised Radio Link Reconfiguration Commit g) Synchronised Radio Link Reconfiguration Cancellation
Measurements on Dedicated Resources	a) Dedicated Measurement Initiation b) Dedicated Measurement Reporting c) Dedicated Measurement Termination d) Dedicated Measurement Failure
DL Power Drifting Correction [FDD]	Downlink Power Control
Reporting of General Error Situations	Error Indication
Physical Shared Channel Management	Physical Shared Channel Reconfiguration
DL Power Timeslot Correction [TDD]	Downlink Power Timeslot Control
Cell Synchronisation [TDD]	a) Cell Synchronisation Initiation b) Cell Synchronisation Reconfiguration c) Cell Synchronisation Reporting d) Cell Synchronisation Termination e) Cell Synchronisation Failure f) Cell Synchronisation Adjustment
Information Exchange	a) Information Exchange Initiation b) Information Reporting c) Information Exchange Termination d) Information Exchange Failure

Function	Elementary Procedure(s)
Bearer Re-arrangement	a) Bearer Re-arrangement Indication b) Unsynchronised Radio Link Reconfiguration c) Synchronised Radio Link Reconfiguration Preparation d) Synchronised Radio Link Reconfiguration Commit e) Synchronised Radio Link Reconfiguration Cancellation

8 NBAP Procedures

8.1 Elementary Procedures

NBAP procedures are divided into common procedures and dedicated procedures.

- NBAP common procedures are procedures that request initiation of a **UE-Node B Communication eC**ontext for a specific UE in Node B or are not related to a specific UE. NBAP common procedures also incorporate logical O&M [1] procedures.
- NBAP dedicated procedures are procedures that are related to a specific **UE-Node B Communication eC**ontext in Node B. This **UE-Node B Communication eC**ontext is identified by a **UE-Node B Communication eC**ontext identity.

The two types of procedures may be carried on separate signalling links.

In the following tables, all EPs are divided into Class 1 and Class 2 EPs:

Table 2: Class 1

Elementary Procedure	Message	Successful Outcome	Unsuccessful Outcome
		Response message	Response message
Cell Setup	CELL SETUP REQUEST	CELL SETUP RESPONSE	CELL SETUP FAILURE
Cell Reconfiguration	CELL RECONFIGURATION REQUEST	CELL RECONFIGURATION RESPONSE	CELL RECONFIGURATION FAILURE
Cell Deletion	CELL DELETION REQUEST	CELL DELETION RESPONSE	
Common Transport Channel Setup	COMMON TRANSPORT CHANNEL SETUP REQUEST	COMMON TRANSPORT CHANNEL SETUP RESPONSE	COMMON TRANSPORT CHANNEL SETUP FAILURE
Common Transport Channel Reconfiguration	COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST	COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE	COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE
Common Transport Channel Deletion	COMMON TRANSPORT CHANNEL DELETION REQUEST	COMMON TRANSPORT CHANNEL DELETION RESPONSE	
Physical Shared Channel Reconfigure	PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST	PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE	PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE
Audit	AUDIT REQUEST	AUDIT RESPONSE	AUDIT FAILURE
Block Resource	BLOCK RESOURCE REQUEST	BLOCK RESOURCE RESPONSE	BLOCK RESOURCE FAILURE
Radio Link Setup	RADIO LINK SETUP REQUEST	RADIO LINK SETUP RESPONSE	RADIO LINK SETUP FAILURE
System Information Update	SYSTEM INFORMATION UPDATE REQUEST	SYSTEM INFORMATION UPDATE RESPONSE	SYSTEM INFORMATION UPDATE FAILURE
Common Measurement Initiation	COMMON MEASUREMENT INITIATION REQUEST	COMMON MEASUREMENT INITIATION RESPONSE	COMMON MEASUREMENT INITIATION FAILURE
Radio Link Addition	RADIO LINK ADDITION REQUEST	RADIO LINK ADDITION RESPONSE	RADIO LINK ADDITION FAILURE
Radio Link Deletion	RADIO LINK DELETION REQUEST	RADIO LINK DELETION RESPONSE	
Synchronised Radio Link Reconfiguration Preparation	RADIO LINK RECONFIGURATION PREPARE	RADIO LINK RECONFIGURATION READY	RADIO LINK RECONFIGURATION FAILURE
Unsynchronised Radio Link Reconfiguration	RADIO LINK RECONFIGURATION REQUEST	RADIO LINK RECONFIGURATION RESPONSE	RADIO LINK RECONFIGURATION FAILURE
Dedicated Measurement Initiation	DEDICATED MEASUREMENT INITIATION REQUEST	DEDICATED MEASUREMENT INITIATION RESPONSE	DEDICATED MEASUREMENT INITIATION FAILURE
Reset	RESET REQUEST	RESET RESPONSE	
Cell Synchronisation Initiation [TDD]	CELL SYNCHRONISATION INITIATION REQUEST	CELL SYNCHRONISATION INITIATION RESPONSE	CELL SYNCHRONISATION INITIATION FAILURE
Cell Synchronisation Reconfiguration [TDD]	CELL SYNCHRONISATION RECONFIGURATION REQUEST	CELL SYNCHRONISATION RECONFIGURATION RESPONSE	CELL SYNCHRONISATION RECONFIGURATION FAILURE
Cell Synchronisation Adjustment [TDD]	CELL SYNCHRONISATION ADJUSTMENT REQUEST	CELL SYNCHRONISATION ADJUSTMENT RESPONSE	CELL SYNCHRONISATION ADJUSTMENT FAILURE
Information Exchange Initiation	INFORMATION EXCHANGE INITIATION REQUEST	INFORMATION EXCHANGE INITIATION RESPONSE	INFORMATION EXCHANGE INITIATION FAILURE

Table 3: Class 2

Elementary Procedure	Message
Resource Status Indication	RESOURCE STATUS INDICATION
Audit Required	AUDIT REQUIRED INDICATION
Common Measurement Reporting	COMMON MEASUREMENT REPORT
Common Measurement Termination	COMMON MEASUREMENT TERMINATION REQUEST
Common Measurement Failure	COMMON MEASUREMENT FAILURE INDICATION
Synchronised Radio Link Reconfiguration Commit	RADIO LINK RECONFIGURATION COMMIT
Synchronised Radio Link Reconfiguration Cancellation	RADIO LINK RECONFIGURATION CANCELLATION
Radio Link Failure	RADIO LINK FAILURE INDICATION
Radio Link Restoration	RADIO LINK RESTORE INDICATION
Dedicated Measurement Reporting	DEDICATED MEASUREMENT REPORT
Dedicated Measurement Termination	DEDICATED MEASUREMENT TERMINATION REQUEST
Dedicated Measurement Failure	DEDICATED MEASUREMENT FAILURE INDICATION
Downlink Power Control [FDD]	DL POWER CONTROL REQUEST
Compressed Mode Command [FDD]	COMPRESSED MODE COMMAND
Unblock Resource	UNBLOCK RESOURCE INDICATION
Error Indication	ERROR INDICATION
Downlink Power Timeslot Control [TDD]	DL POWER TIMESLOT CONTROL REQUEST
Radio Link Pre-emption	RADIO LINK PREEMPTION REQUIRED INDICATION
Cell Synchronisation Reporting [TDD]	CELL SYNCHRONISATION REPORT
Cell Synchronisation Termination [TDD]	CELL SYNCHRONISATION TERMINATION REQUEST
Cell Synchronisation Failure [TDD]	CELL SYNCHRONISATION FAILURE INDICATION
Information Reporting	INFORMATION REPORT
Information Exchange Termination	INFORMATION EXCHANGE TERMINATION REQUEST
Information Exchange Failure	INFORMATION EXCHANGE FAILURE INDICATION
Bearer Re-arrangement	BEARER REARRANGEMENT INDICATION

8.2 NBAP Common Procedures

8.2.1 Common Transport Channel Setup

8.2.1.1 General

This procedure is used for establishing the necessary resources in Node B, regarding Secondary CCPCH, PICH, PRACH, PCPCH [FDD], AICH [FDD], AP_AICH [FDD], CD/CA-ICH [FDD], FACH, PCH, RACH, FPACH[1.28Mcps TDD] and CPCH [FDD].

8.2.1.2 Successful Operation

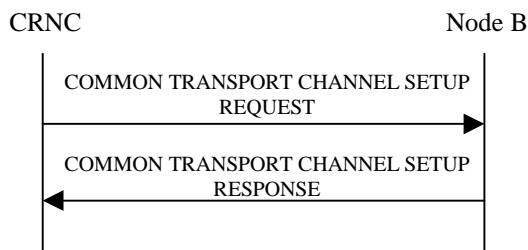


Figure 1: Common Transport Channel Setup procedure, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL SETUP REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

One message can configure only one of the following combinations:

- [FDD - one Secondary CCPCH, and FACHs, PCH and PICH related to that Secondary CCPCH], or
- [TDD - one CCTrCH consisting of Secondary CCPCHs and FACHes, PCH with the corresponding PICH related to that group of Secondary CCPCHs], or
- one [1.28Mcps TDD – or more] PRACH, one RACH and one AICH [FDD] and one FPACH[1.28Mcps TDD] related to that PRACH.
- [FDD-PCPCHs, one CPCH, one AP_AICH and one CD/CA-ICH related to that group of PCPCHs.]

Secondary CCPCH:

—[FDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the Secondary CCPCH IEa-Secondary CCPCH, the Node B shall configure and activate the indicated Secondary CCPCH it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.]

[TDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the Secondary CCPCH IEone or more Secondary CCPCHs, the Node B shall configure and activate the indicated Secondary CCPCH(s) them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.]

[TDD_- FACHs and PCH may be mapped onto a CCTrCH which may consist of several Secondary CCPCHs]

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the FACH Parameters IEone or several FACHs, the Node B shall configure and activate the indicated FACH(s) them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the PCH Parameters IEa-PCH and a PICH, the Node B shall configure and activate the concerned PCH and the associated PICH them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

PRACH:

—When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the PRACH IEa-PRACH, the Node B shall configure and activate it-the indicated PRACH and the associated RACH [FDD – and the associated AICH] according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[1.28Mcps TDD – FPACH]:

—If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the FPACH IEa-FPACH, the Node B shall configure and activate the indicated FPACH it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[FDD-PCPCHs]:

—When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the CPCH Parameters IEPCPCHs, the Node B shall configure and activate the indicated CPCH and the associated PCPCH(s), AP-AICH and CD/CA-ICH it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

—If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *CD Signatures* IE, the Node B may use only the given CD signatures on CD/CA-ICH.

—If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *Channel Request Parameters* IE, the Node B shall use the parameters to distinguish the PCPCHs.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *AP Sub Channel Number* IE in *Channel Request Parameters* IE, the Node B shall use AP sub channel number to distinguish the PCPCHs.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *AP Sub Channel Number* IE in *SF Request Parameters* IE, the Node B shall use AP sub channel number to distinguish the requested Spreading Factors.

General:

After successfully configuring the requested common transport channels and the common physical channels, the Node B shall store the value of *Configuration Generation ID* IE and it shall respond with the COMMON TRANSPORT CHANNEL SETUP RESPONSE message with the *Common Transport Channel ID* IE, the *Binding ID* IE and the *Transport Layer Address* IE for the configured common transport channels.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes the *Transport Layer Address* and *Binding ID* IEs, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the indicated common transport channels.

After a successful procedure and once the transport bearers are established, the configured common transport channels and the common physical channels shall adopt the state Enabled [6] in the Node B and the common physical channels exist on the Uu interface.

8.2.1.3 Unsuccessful Operation

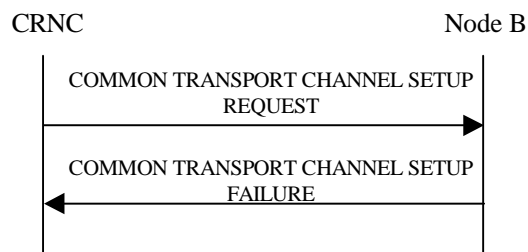


Figure 2: Common Transport Channel Setup procedure, Unsuccessful Operation

If the Node B is not able to support all or part of the configuration, it shall reject the configuration of all the channels in the COMMON TRANSPORT CHANNEL SETUP REQUEST message. The channels in the COMMON TRANSPORT CHANNEL SETUP REQUEST message shall remain in the same state as prior to the procedure. The *Cause* IE shall be set to an appropriate value. The value of *Configuration Generation ID* IE from the COMMON TRANSPORT CHANNEL SETUP REQUEST message shall not be stored.

If the configuration was unsuccessful, the Node B shall respond with a COMMON TRANSPORT CHANNEL SETUP FAILURE message.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell not available
- Power level not supported
- Node B Resources unavailable
- Requested Tx Diversity Mode not supported
- UL SF not supported

- DL SF not supported
- Common Transport Channel Type not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.1.4 Abnormal Conditions

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Secondary CCPCH* IE, and that IE contains—[FDD – neither the *FACH Parameters* IE nor the *PCH Parameters* IE] [TDD – neither the *FACH* IE nor the *PCH* IE], the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.

[FDD – If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *CD Sub Channel Numbers* IE, but the *CD Signatures* IE is not present, then the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.]

[TDD — If the *FACH CTrCH *i*d* IE or the *PCH CTrCH *i*d* IE does not equal the *SCCPCH CTrCH *i*d* IE, the Node B shall regard the Common Transport Channel Setup procedure as having failed and the Node B shall send the COMMON TRANSPORT CHANNEL SETUP FAILURE message to the CRNC.]

[TDD — If the *TDD Physical Channel Offset* IE, the *Repetition Period* IE, and the *Repetition Length* IE are not equal for each SCCPCH configured within the CTrCH, the Node B shall regard the Common Transport Channel Setup procedure as having failed and the Node B shall send the COMMON TRANSPORT CHANNEL SETUP FAILURE message to the CRNC.]

If the state is already Enabled or Disabled [6] for at least one channel in the COMMON TRANSPORT CHANNEL SETUP REQUEST message which is received, the Node B shall reject the configuration of all channels with the *Cause* IE set to "Message not compatible with receiver state".

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE, and not both are present for a transport channel intended to be established, the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.

8.2.2 Common Transport Channel Reconfiguration

8.2.2.1 General

This procedure is used for reconfiguring common transport channels and/or common physical channels, while they still might be in operation.

8.2.2.2 Successful Operation

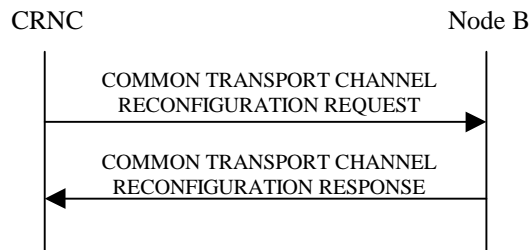


Figure 3: Common Transport Channel Reconfiguration, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

One message can configure only one of the following combinations:

- [FDD – FACHs, one PCH and/or one PICH related to one Secondary CCPCH], or
- [TDD – one CCTrCH consisting of Secondary CCPCHs and FACHs, PCH with the corresponding PICH related to that group of Secondary CCPCHs], or
- one RACH and/or one AICH[FDD]) and/or one FPACH[1.28Mcps TDD] related to one PRACH, or
- [FDD – one CPCH and/or one AP-AICH and/or one CD/CA-ICH related to one CPCH].

~~FDD~~–SCCPCH:

— [TDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *SCCPCH Power* IE, the Node B shall reconfigure the power that the indicated S-CCPCH shall use.]

FACH:

— If the FACH Parameters IE is present, the Node B shall reconfigure the indicated FACH(s).

[FDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Max FACH Power* IE, the Node B shall reconfigure the maximum power that the indicated FACH may use.]

[1.28Mcps TDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Max FACH Power* IE, the Node B shall reconfigure the maximum power that the indicated FACH may use.]

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWS* IE, the Node B shall reconfigure the time of arrival window startpoint that the indicated FACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWE* IE, the Node B shall reconfigure the time of arrival window endpoint that the indicated FACH shall use.

PCH:

— If the PCH Parameters IE When the PCH is present, the Node B shall reconfigure the indicated PCH.

[FDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *PCH Power* IE, the Node B shall reconfigure the power that the PCH shall use.]

[1.28Mcps TDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *PCH Power* IE, the Node B shall reconfigure the power that the PCH shall use.]

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWS* IE, the Node B shall reconfigure the time of arrival window startpoint that the PCH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWE* IE, the Node B shall reconfigure the time of arrival window endpoint that the PCH shall use.

PICH:

If the *PICH Parameters IE* When a PICH is present, the Node B shall reconfigure the indicated PICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *PICH Power IE*, the Node B shall reconfigure the power that the PICH shall use.

[FDD – PRACH]:

— If the *PRACH Parameters IE* When a PRACH is present, the Node B shall reconfigure the indicated PRACH(s).

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Preamble Signatures IE* Allowed Preamble Signatures Information, the Node B shall reconfigure the preamble signatures that the indicated PRACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Allowed Slot Format Information IE* Allowed Slot Format Information, the Node B shall reconfigure the slot formats that the indicated PRACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *RACH Sub Channel Numbers IE* Allowed Sub Channel Information, the Node B shall reconfigure the sub channel numbers that the indicated PRACH shall use.

[FDD – AICH]:

— If the *AICH Parameters IE* When a AICH is present, the Node B shall reconfigure the indicated AICH(s).

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *AICH Power IE*, the Node B shall reconfigure the power that the indicated AICH shall use.

[FDD – CPCH]:

— If the *CPCH Parameters IE* When a CPCH is present, the Node B shall reconfigure the indicated CPCH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *UL SIR IE* UL SIR Information, the Node B shall reconfigure the UL SIR for the UL power control for the indicated CPCH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Initial DL Transmission Power IE* Initial DL transmission Power Information, the Node B shall reconfigure the Initial DL Transmission Power for the indicated CPCH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Maximum DL Power IE* Maximum DL Power Information, the Node B shall apply this value to the new configuration of the indicated CPCH and never transmit with a higher power on any DL PCPCHs once the new configuration is being used.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Minimum DL Power IE* Minimum DL Power Information, the Node B shall apply this value to the new configuration of the indicated CPCH and never transmit with a lower power on any DL PCPCHs once the new configuration is being used.

[FDD – AP-AICH]:

— If the *AP-AICH Parameters IE* When a AP-AICH is present, the Node B shall reconfigure the indicated AP-AICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *AP-AICH Power IE*, the Node B shall reconfigure the power that the AP-AICH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *CSICH Power IE*, the Node B shall reconfigure the power that the CSICH shall use.

[FDD-CD/CA-ICH]:

If the *CD/CA-ICH Parameters IE* When a CD/CA-ICH is present, the Node B shall reconfigure the indicated CD/CA-ICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *CD/CA-AICH Power IE*, the Node B shall reconfigure the power that the CD/CA-AICH shall use.

[1.28Mcps TDD - FPACH]:

If the FPACH is included, the Node B shall reconfigure the indicated FPACH.

—If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Max FPACH Power* IE, the Node B shall reconfigure the power that the FPACH shall use.

General:

After a successful procedure, the channels will have adopted the new configuration in the Node B. The channels in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message shall remain in the same state as prior to the procedure. The Node B shall store the value of *Configuration Generation ID* IE, and the Node B shall respond with the COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE message.

8.2.2.3 Unsuccessful Operation

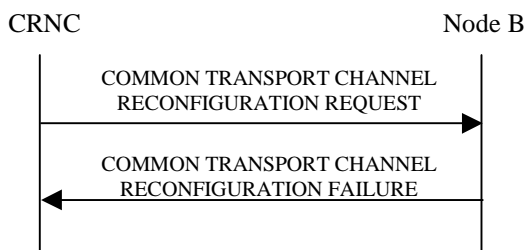


Figure 4: Common Transport Channel Reconfiguration procedure, Unsuccessful Operation

If the Node B is not able to support all or parts of the configuration, it shall reject the configuration of all the channels in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message. The channels in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message shall remain in the same state as prior to the procedure. The *Cause* IE shall be set to an appropriate value. The value of *Configuration Generation ID* IE from the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message shall not be stored.

If the configuration was unsuccessful, the Node B shall respond with the COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE message.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell not available
- Power level not supported
- Node B Resources unavailable

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.2.4 Abnormal Conditions

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8.2.3 Common Transport Channel Deletion

8.2.3.1 General

This procedure is used for deleting common physical channels and common transport channels.

8.2.3.2 Successful Operation

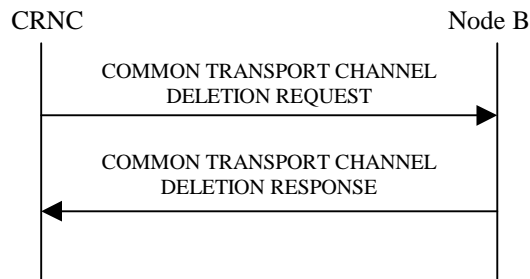


Figure 5: Common Transport Channel Deletion procedure, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL DELETION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Secondary CCPCH:

— When-If the Common Physical Channel ID IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates contains a Secondary CCPCH, the Node B shall delete the indicated channel and the FACHs and PCH supported by that Secondary CCPCH. If there is a PCH that is deleted, the PICH associated with that PCH shall also be deleted.

PRACH:

— When-If the Common Physical Channel ID IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates contains a PRACH, the Node B shall delete the indicated channel and the RACH supported by the PRACH. [FDD - The AICH associated with the RACH shall also be deleted.]

[FDD – PCPCHes]:

— When-If the Common Physical Channel ID IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates contains one of the PCPCHes for a CPCH, the Node B shall delete all PCPCHs associated with the indicated channel and the CPCH supported by these PCPCHes. The AP-AICH and CD/CA-ICH associated with the CPCH shall also be deleted.

General:

[TDD – If the requested common physical channel is a part of a CCTrCH, all common transport channels and all common physical channels associated with this CCTrCH shall be deleted.]

After a successful procedure, the channels are deleted in the Node B. The channels in the COMMON TRANSPORT CHANNEL DELETION REQUEST message shall be set to state Not Existing ref. [6]. The Node B shall store the received value of the *Configuration Generation ID IE*, and respond with the COMMON TRANSPORT CHANNEL DELETION RESPONSE message.

8.2.3.3 Unsuccessful Operation

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8.2.3.4 Abnormal Conditions

If the C-ID in the COMMON TRANSPORT CHANNEL DELETION REQUEST message is not existing in the Node B or the Common Physical Channel ID does not exist in the Cell, the Node B shall respond with the COMMON TRANSPORT CHANNEL DELETION RESPONSE message.

8.2.4 Block Resource

8.2.4.1 General

The Node B initiates this procedure to request the CRNC to prohibit the usage of the specified logical resources.

The logical resource that can be blocked is a cell.

8.2.4.2 Successful Operation

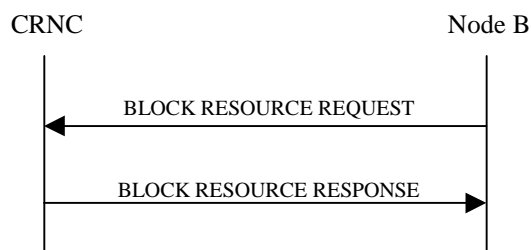


Figure 6: Block Resource procedure, Successful Operation

The procedure is initiated with a BLOCK RESOURCE REQUEST message sent from the Node B to the CRNC **using the Node B Control Port**.

Upon reception of the BLOCK RESOURCE REQUEST message, the CRNC shall prohibit the use of the indicated logical resources according to the *Blocking Priority Indicator IE*.

If the *Blocking Priority Indicator IE* in the BLOCK RESOURCE REQUEST message indicates *"High Priority"*, the CRNC shall prohibit the use of the logical resources immediately.

The BLOCK RESOURCE REQUEST message shall include the Shutdown Timer IE when If the Blocking Priority Indicator IE in the BLOCK RESOURCE REQUEST message indicates "Normal Priority", the CRNC shall prohibit the use of the logical resources if the resources are idle or immediately upon expiry of the shutdown timer specified by the Shutdown Timer IE in the BLOCK RESOURCE REQUEST message. New traffic shall not be allowed to use the logical resources while the CRNC waits for the resources to become idle and once the resources are blocked.

If the *Blocking Priority Indicator IE* in the BLOCK RESOURCE REQUEST message indicates *"Low Priority"*, the CRNC shall prohibit the use of the logical resources when the resources become idle. New traffic shall not be allowed to use the logical resources while the CRNC waits for the resources to become idle and once the resources are blocked.

If the resources are successfully blocked, the CRNC shall respond with a BLOCK RESOURCE RESPONSE message. Upon reception of the BLOCK RESOURCE RESPONSE message, the Node B may disable [3.84Mcps TDD - SCH], [FDD - the Primary SCH, the Secondary SCH, the Primary CPICH, if present the Secondary CPICH(s)], [1.28Mcps TDD - DwPCH] and the Primary CCPCH. The other logical resources in the cell shall be considered as blocked.

Reconfiguration of logical resources and change of System Information can be done, even when the logical resources are blocked.

Interactions with the Unblock Resource procedure:

If the UNBLOCK RESOURCE INDICATION message is received by the CRNC while a Block Resource procedure on the same logical resources is in progress, the CRNC shall cancel the Block Resource procedure and proceed with the Unblock Resource procedure.

If the BLOCK RESOURCE RESPONSE message or the BLOCK RESOURCE FAILURE message is received by the Node B after the Node B has initiated an Unblock Resource procedure on the same logical resources as the ongoing Block Resource procedure, the Node B shall ignore the response to the Block Resource procedure.

8.2.4.3 Unsuccessful Operation

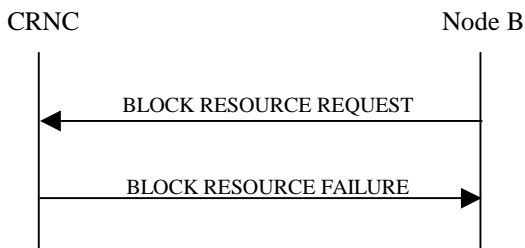


Figure 7: Block Resource procedure, Unsuccessful Operation

The CRNC may reject the request to block the logical resources, in which case the logical resources will remain unaffected and the CRNC shall respond to the Node B with the BLOCK RESOURCE FAILURE message. Upon reception of the BLOCK RESOURCE FAILURE message, the Node B shall leave the logical resources in the state that they were in prior to the start of the Block Resource procedure.

Typical cause values are as follows:

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

Radio Network Layer Cause

- Priority transport channel established

8.2.4.4 Abnormal Conditions

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8.2.5 Unblock Resource

8.2.5.1 General

The Node B initiates this procedure to indicate to the CRNC that logical resources are now unblocked.

The logical resource that can be unblocked is a cell.

8.2.5.2 Successful Operation

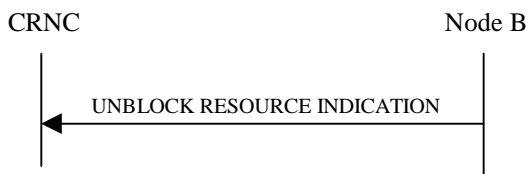


Figure 8: Unblock Resource procedure, Successful Operation

The procedure is initiated with an UNBLOCK RESOURCE INDICATION message sent from the Node B to the CRNC using the Node B Control Port. The Node B shall enable [TDD - SCH], [FDD - the Primary SCH, the Secondary SCH, the Primary CPICH, the Secondary CPICH(s) (if present)], [1.28Mcps TDD – DwPCH] and the Primary CCPCH that had been disabled due to the preceding Block Resource procedure before sending the UNBLOCK RESOURCE INDICATION message. Upon reception of the UNBLOCK RESOURCE INDICATION message, the CRNC may permit the use of the logical resources.

When the logical resource indicated is a cell, all associated physical channels and transport channels associated to the cell that is unblocked are also unblocked.

8.2.5.3 Abnormal Conditions

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8.2.6 Audit Required

8.2.6.1 General

The Node B initiates this procedure to request the CRNC to perform an audit of the logical resources at the Node B. This procedure is used to indicate a possible misalignment of state or configuration information.

8.2.6.2 Successful Operation

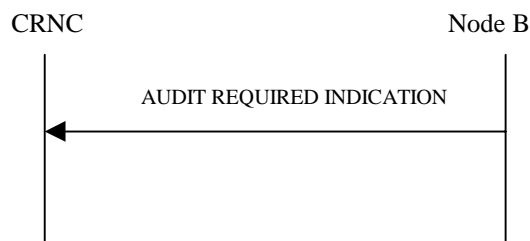


Figure 9: Audit Required procedure, Successful Operation

The procedure is initiated with an AUDIT REQUIRED INDICATION message sent from the Node B to the CRNC using the Node B Control Port.

If the Node B cannot ensure alignment of the state or configuration information, it should initiate the Audit Required procedure.

Upon receipt of the AUDIT REQUIRED INDICATION message, the CRNC should initiate the Audit procedure.

8.2.6.3 Abnormal Conditions

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8.2.7 Audit

8.2.7.1 General

This procedure is executed by the CRNC to perform an audit of the configuration and status of the logical resources in the Node B. A complete audit of a Node B is performed by one or more Audit procedures, together performing an audit sequence. The audit may cause the CRNC to re-synchronise the Node B to the status of logical resources known by the CRNC, that the Node B can support.

8.2.7.2 Successful Operation

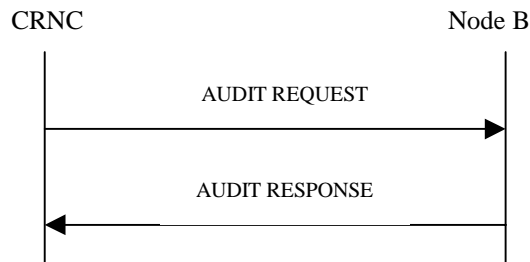


Figure 10: Audit procedure, Successful Operation

The procedure is initiated with an AUDIT REQUEST message sent from the CRNC to the Node B **using the Node B Control Port**.

If the *Start of Audit Sequence* IE in the AUDIT REQUEST message is set to "start of audit sequence" a new audit sequence is started, any ongoing audit sequence shall be aborted and the Node B shall provide (part of the) audit information. If the *Start of Audit Sequence* IE is set to "not start of audit sequence", the Node B shall provide (part of) the remaining audit information not already provided during this audit sequence.

If the information provided in the AUDIT RESPONSE message completes the audit sequence, the Node B shall set the *End Of AuditSequence Indicator* IE in the AUDIT RESPONSE message to "End of Audit Sequence". If not all audit information has been provided yet as part of the ongoing audit sequence, the Node B shall set the *End Of AuditSequence Indicator* IE in the AUDIT RESPONSE message to "Not End of Audit Sequence".

Information Provided In One Audit Sequence.

The Node B shall include one *Local Cell Information* IE for each local cell present in the Node B. The Node B shall include the *Maximum DL Power Capability* IE and the *Minimum DL Power Capability* IE when any of those values are known by the Node B.

[TDD - The Node B shall include the *Reference Clock availability* IE to indicate the availability of a Reference clock connected to the Local eCell.]

If **the** Node B internal resources are pooled for a group of cells, the Node B shall include one *Local Cell Group Information* IE containing **the** Node B internal resource capacity and **the** consumption laws per group of cells. If the *UL Capacity Credit* IE is not present, then the internal resource capabilities of the Node B are modelled as shared resources between Uplink and Downlink.

If the Node B internal power resources are pooled for a group of Local Cells, the Node B shall include one *Power Local Cell Group Information* IE containing the Maximum DL Power Capability for each Power Local Cell Group for which this value is known by the Node B. In this case, the Node B shall also include the *Maximum DL Power Capability* IE in the *Local Cell Information* IE for all the Local Cells belonging to a Power Local Cell Group reported in the *Power Local Cell Group Information* IE. Furthermore, the sum of the Maximum DL Power Capability of all the Local Cells belonging to the same Power Local Cell Group shall not exceed the Maximum DL Power Capability of the concerned Power Local Cell Group.

The Node B shall include, for each local cell present in the Node B, the Node B internal resource capability and consumption laws within the *Local Cell Information* IE. If the *UL Capacity Credit* IE is not present, then the internal resource capabilities of the local cell are modelled as shared resources between Uplink and Downlink. If the Local Cell utilises Node B internal resource capabilities that are pooled for several Local Cell(s), the *Local Cell Group ID* IE shall contain the identity of the used Local Cell Group. If the Local Cell utilises Node B internal power resources that are pooled for several Local Cells, the *Power Local Cell Group ID* IE shall contain the identity of the concerned Power Local Cell Group.

The Node B shall include one *Cell Information* IE for each cell in the Node B and information about all common transport channels and all common physical channels for each cell. If a *Configuration Generation ID* IE for a cell can not be trusted, the Node B shall set this *Configuration Generation ID* IE = "0".

The Node B shall also include one *Communication Control Port Information* IE for each eCCommunication eControl pPort in the Node B.

8.2.7.3 Unsuccessful Operation

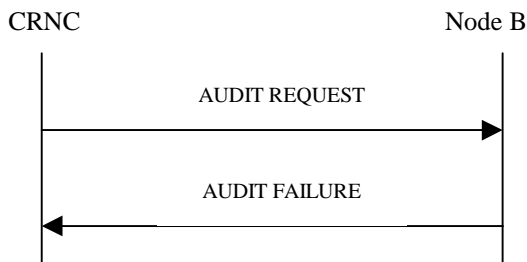


Figure 10A: Audit procedure, Unsuccessful Operation

If the Node B can-not perform an audit of the configuration and status of the logical resources, it shall send a AUDIT FAILURE message with the *Cause* IE set to an appropriate value.

8.2.7.4 Abnormal Conditions

If the Node B receives the AUDIT REQUEST message with the *Start of Audit Sequence* IE set to "not start of audit sequence" and there is no ongoing audit sequence, the Node B shall send the AUDIT FAILURE message with the appropriate cause value.

8.2.8 Common Measurement Initiation

8.2.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on common resources in a Node B.

8.2.8.2 Successful Operation

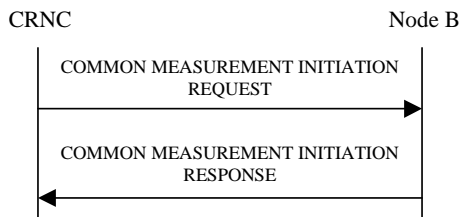


Figure 11: Common Measurement Initiation procedure, Successful Operation

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the Node B eControl pPort.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

[TDD - If the Time Slot Information [3.84Mcps TDD – Time Slot IE] [1.28Mcps TDD – Time Slot LCR IE] is provided present in the COMMON MEASUREMENT INITIATION REQUEST message Common Measurement Object Type IE, the measurement request shall apply to the requested time slot individually.]

[FDD - If the Spreading Factor Information Spreading Factor IE is provided present in the COMMON MEASUREMENT INITIATION REQUEST message Common Measurement Object Type IE, the measurement request

shall apply to the PCPCHs whose minimum allowed spreading factor (Min UL Channelisation Code Length) is equal to the value of ~~the Spreading Factor IE~~ ~~Spreading Factor Information~~.

If the *Common Measurement Type* IE is not set to ~~"SFN-SFN Observed Time Difference"~~ and the *SFN Reporting Indicator* IE is set to "FN Reporting Required", the *SFN* IE shall be included in the ~~COMMON MEASUREMENT REPORT message measurement report~~ or in the ~~COMMON MEASUREMENT RESPONSE message measurement response~~, the latter only in the case the *Report Characteristics* IE is set to ~~"On-Demand"~~. The reported SFN shall be the SFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25]. If the *Common Measurement Type* IE is set to ~~"SFN-SFN Observed Time Difference"~~ and the *SFN Reporting Indicator* IE is ignored.

If the *SFN* IE is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

Common measurement type

If the *Common Measurement Type* IE is set to ~~"SFN-SFN Observed Time Difference"~~, then the Node B shall initiate the SFN-SFN Observed Time Difference measurements between the reference cell identified by *C-ID* IE and the neighbouring cells identified by the *UTRAN Cell Identifier(UC-Id)* IE.

Report characteristics

The *Report Characteristics* IE indicates how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to ~~"On-Demand"~~, the Node B shall ~~report-return~~ the result of the requested measurement immediately.

If the *Report Characteristics* IE is set to ~~"Periodic"~~, the Node B shall periodically initiate a ~~Common~~ Measurement Reporting procedure for this measurement, with the requested report frequency. If the *Common Measurement Type* IE is set to ~~"SFN-SFN Observed Time Difference"~~, all the available measurement results shall be reported in the *Successful Neighbouring eCell SFN-SFN Observed Time Difference Measurement Information* IE in the *SFN-SFN Measurement Value Information* IE and the Node B shall indicate in the *Unsuccessful Neighbouring eCell SFN-SFN Observed Time Difference Measurement Information* IE all the remaining neighbouring cells with no measurement result available in the Common Measurement Reporting procedure.

If the *Report Characteristics* IE is set to ~~"Event A"~~, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If ~~the Measurement Hysteresis Time IE is not included~~ ~~no hysteresis time is given~~, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to ~~"Event B"~~, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If ~~the Measurement Hysteresis Time IE is not included~~ ~~no hysteresis time is given~~, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to ~~"Event C"~~, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the ~~rising/falling~~ time ~~specified by the Measurement Change Time IE~~ has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to ~~"Event D"~~, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls ~~more-by an amount greater~~ than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the ~~rising/falling~~ time ~~specified by the Measurement Change Time IE~~ has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to ~~"Event E"~~, the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If ~~the Measurement Threshold 2 IE Measurement Threshold 2~~ is not present, the Node B shall use ~~the value of the Measurement Threshold 1 IE Measurement Threshold 1~~ instead. If ~~the~~

~~Measurement Hysteresis Time IE is not included~~no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to "Event F", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the Node B shall also initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If ~~the Measurement Threshold 2 IE 'Measurement Threshold 2'~~ is not present, the Node B shall use ~~the value of the Measurement Threshold 1 IE 'Measurement Threshold 1'~~ instead. If ~~the Measurement Hysteresis Time IE is not included~~no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to "On Modification", the Node B shall report the result of the requested measurement immediately. Then, the Node B shall initiate the Common Measurement Reporting procedure in accordance to the following conditions:

1. If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frame" for ~~LCSUE Positioning~~:

- If the *T_{UTRAN-GPS} Change Limit* IE is included in the *T_{UTRAN-GPS} Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of T_{UTRAN-GPS} value (F_n). The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of F_n rises above the threshold indicated by the *T_{UTRAN-GPS} Change Limit* IE. The change of T_{UTRAN-GPS} value (F_n) is calculated according to the following:

$$F_n = 0 \text{ for } n = 0$$

$$F_n = (M_n - M_{n-1}) \bmod 37152912000000 - ((SFN_n - SFN_{n-1}) \bmod 4096) * 10 * 3.84 * 10^3 * 16 + F_{n-1}$$

$$\text{---} \text{ for } n > 0$$

F_n is the change of the T_{UTRAN-GPS} value expressed in unit [1/16 chip] when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M_{n-1} is the previous measurement result received after point C in the measurement model [25], measured at SFN_{n-1}.

M₁ is the first measurement result received after point C in the measurement model [25], after the first Common Measurement Reporting at initiation or after the last event was triggered.

M₀ is equal to the value reported in the first Common Measurement Reporting at initiation or in the Common Measurement Reporting when the event was triggered.

- If the *Predicted T_{UTRAN-GPS} Deviation Limit* IE is included in the *T_{UTRAN-GPS} Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the P_n and F_n. The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when F_n rises above the threshold indicated by the *Predicted T_{UTRAN-GPS} Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$$P_n = b \text{ for } n = 0$$

$$P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096) / 100 + ((SFN_n - SFN_{n-1}) \bmod 4096) * 10 * 3.84 * 10^3 * 16 + P_{n-1}) \bmod 37158912000000 \text{ for } n > 0$$

$$F_n = \min((M_n - P_n) \bmod 37158912000000, (P_n - M_n) \bmod 37158912000000) \text{ for } n > 0$$

P_n is the predicted T_{UTRAN-GPS} value when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported T_{UTRAN-GPS} Drift Rate value.

b is the last reported $T_{\text{UTRAN-GPS}}$ value.

F_n is the deviation of the last measurement result from the predicted $T_{\text{UTRAN-GPS}}$ value (P_n) when n measurements *have*s been received after *the* first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n .

M_j is the first measurement result received after point C in the measurement model [25], after *the* first Common Measurement Reporting at initiation or after the last event was triggered.

The $T_{\text{UTRAN-GPS}}$ Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

2. If the *Common Measurement Type* IE is set to *"SFN-SFN Observed Time Difference"*:

- If the *SFN-SFN Change Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of SFN-SFN value (F_n). The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when F_n rises above the threshold indicated by the *SFN-SFN Change Limit* IE. The change of the SFN-SFN value is calculated according to the following:

$$F_n = 0 \text{ for } n = 0$$

$$[\text{FDD} - F_n = (M_n - a) \bmod 614400 \text{ for } n > 0]$$

$$[\text{TDD} - F_n = (M_n - a) \bmod 40960 \text{ for } n > 0]$$

F_n is the change of the SFN-SFN

value expressed in unit [1/16 chip] when n measurement results *have*s been received after *the* first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n .

M_j is the first measurement result received after point C in the measurement model [25] after *the* first Common Measurement Reporting at initiation or after the last event was triggered.

- If the *Predicted SFN-SFN Deviation Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the P_n and F_n . The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when the F_n rises above the threshold indicated by the *Predicted SFN-SFN Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$$P_n = b \text{ for } n = 0$$

$$[\text{FDD} - P_n = ((a/16) * ((\text{SFN}_n - \text{SFN}_{n-1}) \bmod 4096) / 100 + P_{n-1}) \bmod 614400 \text{ for } n > 0]$$

$$[\text{FDD} - F_n = \min((M_n - P_n) \bmod 614400, (P_n - M_n) \bmod 614400) \text{ for } n > 0]$$

$$[\text{TDD} - P_n = ((a/16) * (15 * (\text{SFN}_n - \text{SFN}_{n-1}) \bmod 4096 + (TS_n - TS_{n-1})) / 1500 + P_{n-1}) \bmod 40960 \text{ for } n > 0]$$

$$[\text{TDD} - F_n = \min((M_n - P_n) \bmod 40960, (P_n - M_n) \bmod 40960) \text{ for } n > 0]$$

P_n is the predicted SFN-SFN value when n measurement results *have*s been received after *the* first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN Drift Rate value.

b is the last reported SFN-SFN value.

abs denotes the absolute value.

F_n is the deviation of the last measurement result from the predicted $SFN-SFN$ value (P_n) when n measurements have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at the [TDD - the Time Slot TS_n of] of the Frame SFN_n .

M_1 is the first measurement result received after point C in the measurement model [25] after the first Common Measurement Reporting at initiation or after the last event was triggered.

The $-SFN-SFN$ Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

If the *Report Characteristics* IE is not set to "On-Demand", the Node B is required to perform reporting for a common measurement object, in accordance with the conditions provided in the COMMON MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no common measurement object(s) for which a measurement is defined exists any-more, the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Common Measurement Reporting procedure immediately, and then continue with the measurements as specified in the COMMON MEASUREMENT INITIATION REQUEST message.

Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows:

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the COMMON MEASUREMENT INITIATION RESPONSE, COMMON MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n)

$a = 1/2^{(k/2)}$, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

Common measurement accuracy

If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames" for "LCSUE Positioning", then the Node B shall use the *UTRAN GPS Timing Measurement Accuracy Class* IE included in the *Common Measurement Accuracy* IE according to the following:

- If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates "Class A", then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes A, B and C.
- If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates "Class B", then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes B and C.
- If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates "Class C", then the Node B shall perform the measurements with the accuracy according to class C.

Response message

If the Node B was able to initiate the measurement requested by the CRNC, it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message sent over the Node B eControl pPort. The message shall include

the same Measurement ID that was used in the measurement request. Only in the case where the *Report Characteristics* IE is set to "On-Demand", or "On Modification", the COMMON MEASUREMENT INITIATION RESPONSE message shall contain the measurement result and also the *Common Measurement Achieved Accuracy* IE if the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames" for **LCSUE Positioning**.

If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference" and the *Report Characteristics* IE is set to "On Demand" or "On Modification", all the available measurement results shall be reported in the *Successful Neighbouring eCell SFN-SFN Observed Time Difference Measurement Information* IE in the *SFN-SFN Measurement Value Information* IE and the Node B shall indicate in the *Unsuccessful Neighbouring eCell SFN-SFN Observed Time Difference Measurement Information* IE all the remaining neighbouring cells with no measurement result available in the COMMON MEASUREMENT INITIATION RESPONSE message.

8.2.8.3 Unsuccessful Operation

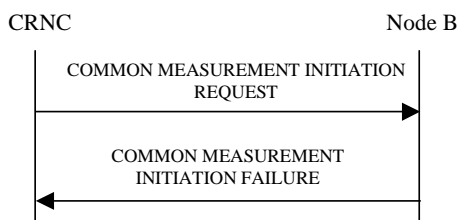


Figure 12: Common Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a COMMON MEASUREMENT INITIATION FAILURE message sent over the Node B eControl pPort. The message shall include the same Measurement ID that was used in the COMMON MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Measurement not supported for the object.
- Measurement Temporarily not Available

8.2.8.4 Abnormal Conditions

If the Common Measurement Type received in the *Common Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Common Measurement Object Type received in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

[TDD - If the eCommon Measurement Type requires the Time Slot Information but the [3.84Mcps TDD - Time Slot IE] [1.28Mcps TDD - Time Slot LCR IE] is not present provided in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.]

If the COMMON MEASUREMENT INITIATION REQUEST message contains the *SFN-SFN Measurement Threshold Information* IE (in the *Measurement Threshold* IE contained in the *Report Characteristics* IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the COMMON MEASUREMENT INITIATION REQUEST message contains the *T_{UTRAN-GPS} Measurement Threshold Information* IE (in the *Measurement Threshold* IE contained in the *Report Characteristics* IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", but the *Neighbouring Cell Measurement Information* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for LCSUE Positioning", but the *T_{UTRAN-GPS} Measurement Accuracy Class* IE in the *Common Measurement Accuracy* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

The allowed combinations of the Common *mMeasurement tType* and Report *eCharacteristics tType* are shown in the table below marked with "X". For not allowed combinations, the Node B shall regard the Common Measurement Initiation procedure as failed.

Table 4: Allowed Common *mMeasurement tType* and Report *eCharacteristics tType* combinations

Common <i>mMeasurement tType</i>	Report <i>eCharacteristics tType</i>								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
Received <i>tTotal wWide bBand Ppower</i>	X	X	X	X	X	X	X	X	
Transmitted Carrier Power	X	X	X	X	X	X	X	X	
Acknowledged PRACH <i>pPreambles</i>	X	X	X	X	X	X	X	X	
UL Timeslot ISCP	X	X	X	X	X	X	X	X	
Acknowledged PCPCH Access Preambles	X	X	X	X	X	X	X	X	
Detected PCPCH Access Preambles	X	X	X	X	X	X	X	X	
UTRAN GPS Timing of Cell Frames for LCSUE Positioning	X	X							X
SFN-SFN Observed Time Difference	X	X							X

8.2.9 Common Measurement Reporting

8.2.9.1 General

This procedure is used by *a-the* Node B to report the result of measurements requested by the CRNC with the Common Measurement Initiation procedure.

8.2.9.2 Successful Operation

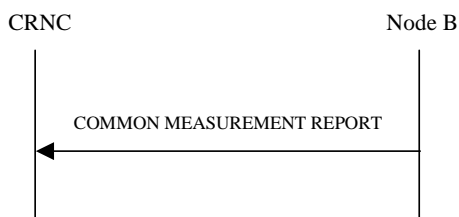


Figure 13: Common Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the Node B shall initiate the Common Measurement Reporting procedure. The COMMON MEASUREMENT REPORT message shall use the Node B eControl pPort.

The **Common Measurement ID** IE shall be set to the **Common Measurement ID** provided by the CRNC when initiating the measurement with the Common Measurement Initiation procedure.

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see ref.[22] and [23]), the Measurement not available shall be reported.

8.2.9.3 Abnormal Conditions

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8.2.10 Common Measurement Termination

8.2.10.1 General

This procedure is used by the CRNC to terminate a measurement previously requested by the Common Measurement Initiation procedure.

8.2.10.2 Successful Operation



Figure 14: Common Measurement Termination procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT TERMINATION REQUEST message, sent from the CRNC to the Node B using the Node B eControl pPort.

Upon reception, the Node B shall terminate reporting of **common** measurements corresponding to the **received Measurement ID IE**~~Common Measurement ID~~.

8.2.10.3 Abnormal Conditions

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8.2.11 Common Measurement Failure

8.2.11.1 General

This procedure is used by the Node B to notify the CRNC that a measurement previously requested by the Common Measurement Initiation procedure can no longer be reported.

8.2.11.2 Successful Operation



Figure 15: Common Measurement Failure procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT FAILURE INDICATION message, sent from the Node B to the CRNC using the Node B eControl pPort, to inform the CRNC that a previously requested measurement can no longer be reported. The Node B has locally terminated the indicated measurement.

8.2.11.3 Abnormal Conditions

-

8.2.12 Cell Setup

8.2.12.1 General

This procedure is used to set up a cell in the Node B. The CRNC takes the cell, identified via the *C-ID* IE, into service and uses the resources in the Node B identified via the *Local Cell ID* IE.

8.2.12.2 Successful Operation

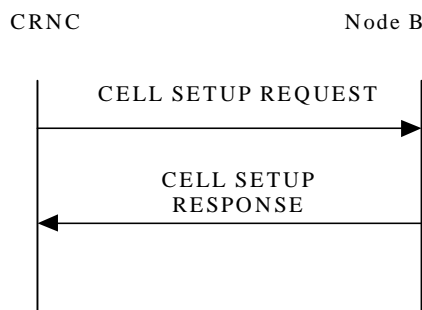


Figure 16: Cell Setup procedure, Successful Operation

The procedure is initiated with a CELL SETUP REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon Reception, the Node B shall reserve the necessary resources and configure the new cell according to the parameters given in the message.

[FDD - If the CELL SETUP REQUEST message includes one or more *Secondary CPICH Information* IE_s, the Node B shall configure and activate the Secondary CPICH(s) in the cell according to received configuration data.]

The *Maximum Transmission Power* IE value shall be stored in the Node B and, at any instance of time, the total maximum output power in the cell shall not be above this value.

[FDD - If the *Closed Loop Timing Adjustment Mode* IE is included in the CELL SETUP REQUEST message, the value shall be stored in the Node B and applied when closed loop Feed-Back mode diversity is used on DPCH.]

[TDD - If the *Reference SFN eOffset* IE is included in the CELL SETUP REQUEST message, the Node B where a reference clock is connected shall consider the SFN derived from the synchronisation port and the reference offset for reference time setting. All other Node B_s shall ignore the *Reference SFN eOffset* IE if included.]

[FDD - If the *IPDL Parameter Information* IE is included in the CELL SETUP REQUEST message, the parameters defining IPDL shall be stored in the Node B and applied according to the *IPDL Indicator* IE value.]

[3.84Mcps TDD - If the *IPDL Parameter Information* IE containing *IPDL TDD parameters* IE is included in the CELL SETUP REQUEST message, the parameters defining IPDL in 3.84Mcps TDD mode shall be stored in the Node B and applied according to the *IPDL Indicator* IE value.]

[1.28Mcps TDD - If the *IPDL Parameter Information LCR* IE containing *IPDL TDD parameters LCR* IE is included in the CELL SETUP REQUEST message, the parameters defining IPDL in 1.28Mcps TDD mode shall be stored in the Node B and applied according to the *IPDL Indicator* IE value.]

When the cell is successfully configured, the Node B shall store the *Configuration Generation ID* IE value and send a CELL SETUP RESPONSE message as a response.

[FDD - When the cell is successfully configured [the](#) CPICH(s), Primary SCH, Secondary SCH, Primary CCPCH and BCH exist.][3.84Mcps TDD - When the cell is successfully configured [the](#) SCH, Primary CCPCH and BCH exist and the switching-points for the 3.84Mcps TDD frame structure are defined.] [1.28Mcps TDD - When the cell is successfully configured, [the](#) DwPCH, Primary CCPCH and BCH exist and the switching-points for the 1.28Mcps TDD frame structure are defined.] The cell and the channels shall be set to [the](#) state Enabled [6].

[FDD – If the CELL SETUP REQUEST message includes the *Maximum PDSCH Power* IE, the Node B shall, if supported, store the values in the Node B and apply the indicated maximum power levels to the PDSCH.]

8.2.12.3 Unsuccessful Operation

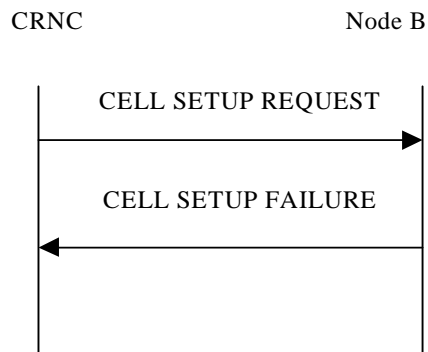


Figure 17: Cell Setup procedure: Unsuccessful Operation

If the Node B cannot set up the cell according to the information given in CELL SETUP REQUEST message the CELL SETUP FAILURE message shall be sent to [the](#) CRNC.

In this case, the cell is Not Existing in [the](#) Node B. The Configuration Generation ID shall not be changed in [the](#) Node B.

The *Cause* IE shall be set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- S-CPICH not supported
- Requested Tx Diversity Mode not supported
- Power level not supported
- Node B Resources unavailable
- IPDL not supported

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.12.4 Abnormal Conditions

If the state of the cell already is Enabled or Disabled [6] when the CELL SETUP REQUEST message is received in [the](#) Node B, it shall reject the configuration of the cell and all channels in the CELL SETUP REQUEST message [by sending a CELL SETUP FAILURE message](#) with the *Cause* IE set to "Message not compatible with receiver state".

~~If the Local Cell on which the cell is mapped does not belong to a Power Local Cell Group and the requested If the Local Cell on which the cell is mapped does not belong to a Power Local Cell Group and the requested maximum~~

transmission power indicated by the *Maximum Transmission Power IE* exceeds the Maximum DL Power Capability of the Local Cell, ~~exceeds the Maximum DL Power Capability of the Local Cell~~, the Node B shall consider the procedure as having failed and send a CELL SETUP FAILURE message to the CRNC.

~~If the Local Cell on which the cell is mapped belongs to a Power Local Cell Group and the requested~~ If the Local Cell on which the cell is mapped belongs to a Power Local Cell Group and the requested maximum transmission power indicated by *Maximum Transmission Power IE* exceeds the Maximum DL Power Capability of the Power Local Cell Group, ~~exceeds the Maximum DL Power Capability of the Power Local Cell Group~~, the Node B shall consider the procedure as having failed and send a CELL SETUP FAILURE message to the CRNC.

8.2.13 Cell Reconfiguration

8.2.13.1 General

This procedure is used to reconfigure a cell in the Node B.

8.2.13.2 Successful Operation

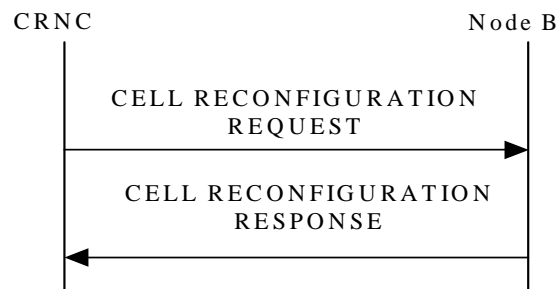


Figure 18: Cell Reconfiguration procedure, Successful Operation

The procedure is initiated with a CELL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon Reception, the Node B shall reconfigure the cell according to the parameters given in the message.

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary SCH Information IE*, the Node B shall reconfigure the Primary SCH power in the cell according to *Primary SCH Power IE* value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Secondary SCH Information IE*, the Node B shall reconfigure the Secondary SCH power in the cell according to the *Secondary SCH Power IE* value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CPICH Information IE*, the Node B shall reconfigure the Primary CPICH power in the cell according to the *Primary CPICH Power IE* value. The Node B shall adjust all the transmitted power levels relative to the Primary CPICH power according to the new value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes one or more *Secondary CPICH Information IE*, the Node B shall reconfigure the power for each Secondary CPICH in the cell according to their *Secondary CPICH Power IE* value.]

[3.84Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *SCH Information IE*, the Node B shall reconfigure the SCH power in the cell according to the *SCH Power IE* value.]

[3.84Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *Timing Advance Applied IE*, the Node B shall apply the necessary functions for Timing Advance in that cell including reporting of the Rx Timing Deviation measurement, according to the *Timing Advance Applied IE* value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CCPCH Information IE*, the Node B shall reconfigure the BCH power in the cell according to the *BCH Power IE* value.]

[TDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CCPCH Information IE*, the Node B shall reconfigure the P-CCPCH power in the cell according to the *P-CCPCH Power IE* value. The Node B shall adjust all the transmitted power levels relative to the Primary CCPCH power according to the new value.]

If the CELL RECONFIGURATION REQUEST message includes the *Maximum Transmission Power IE*, the value shall be stored in the Node B and at any instance of time the total maximum output power in the cell shall not be above this value.

[TDD - If the CELL RECONFIGURATION REQUEST message includes the *Timeslot Information IE*, the Node B shall reconfigure switching-point structure in the cell according to the *Timeslot IE* value.]

[TDD - If the CELL RECONFIGURATION REQUEST message includes any of the *Constant Value IEs*, the Node B shall use these values when generating the appropriate SIB.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information IE* with the *IPDL Indicator IE* having set to the value "Active", the Node B shall apply the IPDL in that cell according to the latest downloaded parameters defined by the *IPDL FDD Parameters IE*]

[3.84Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information IE* with the *IPDL Indicator IE* having set to the value "Active", the Node B shall apply the IPDL in that cell according to the latest downloaded parameters defined by the *IPDL TDD Parameters IE*.]

[1.28Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information LCR IE* with the *IPDL Indicator IE* having set to the value "Active", the Node B shall apply the IPDL in that cell according to the latest downloaded parameters defined by the *IPDL TDD Parameters LCR IE*.]

If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information IE* with the *IPDL Indicator IE* having set to the value "Inactive", the Node B shall deactivate the ongoing IPDL.

When the cell is successfully reconfigured, the Node B shall store the new *Configuration Generation ID IE* value and send a CELL RECONFIGURATION RESPONSE message as a response.

If the CELL RECONFIGURATION REQUEST message includes the *Synchronisation Configuration IE*, the Node B shall reconfigure the indicated parameters in the cell according to the value of the *N_INSYNC_IND, N_OUTSYNC_IND and T_RLFAILURE IEs* value. When the parameters in the *Synchronisation Configuration IE* affect the thresholds applied to a RL set, the Node B shall immediately apply the new thresholds. When applying the new thresholds, the Node B shall not change the state or value of any of the timers and counters for which the new thresholds apply.

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Maximum PDSCH Power IE*, the Node B shall, if supported, store the values in the Node B and apply the indicated maximum power levels to the PDSCH. For spreading factors for which a maximum PDSCH power level was already configured and the CELL RECONFIGURATION REQUEST does not provide a new value for the concerning spreading factor, the Node B shall continue to use the existing value.]

8.2.13.3 Unsuccessful Operation

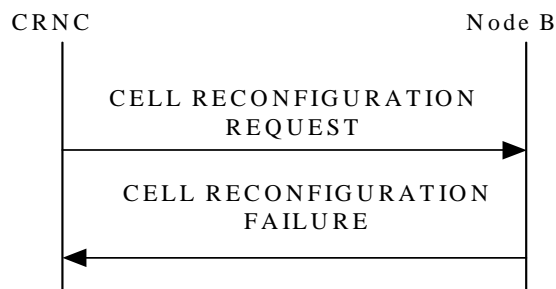


Figure 19: Cell Reconfiguration procedure: Unsuccessful Operation

If the Node B cannot reconfigure the cell according to the information given in CELL RECONFIGURATION REQUEST message, the CELL RECONFIGURATION FAILURE message shall be sent to the CRNC.

In this case, the Node B shall keep the old configuration of the cell and the Configuration Generation ID shall not be changed in the Node B.

The Cause-Cause IE shall be set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Power level not supported
- Node B Resources unavailable
- IPDL not supported

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.13.4 Abnormal Conditions

If the *IPDL Indicator* IE having-set to the value "aActive" is included in the CELL RECONFIGURATION REQUEST message and there is active IPDL ongoing in the Node B, the Node B shall respondse with the CELL RECONFIGURATION FAILURE- message with the cause value "IPDL already activated".]

If the *IPDL Indicator* IE having-set to the value "aActive" is included in the CELL RECONFIGURATION REQUEST message and there is no IPDL stored to-in the Node B defining the IPDL, the Node B shall respondse with the CELL RECONFIGURATION FAILURE- message with the cause value "IPDL parameters not available".]

If the Local Cell on which the cell is mapped does not belong to of a Power Local Cell Group and the requested If the Local Cell on which the cell is mapped does not belong to of a Power Local Cell Group and the requested maximum transmission power indicated by the *Maximum Transmission Power* IE exceeds the Maximum DL Power Capability of the Local Cell, exceeds the Maximum DL Power Capability of the Local Cell, the Node B shall consider the procedure as having failed and send a CELL RECONFIGURATION FAILURE message to the CRNC.

If the Local Cell on which the cell is mapped belongs to a Power Local Cell Group and the requested If the Local Cell on which the cell is mapped belongs to a Power Local Cell Group and the requested maximum transmission power

indicated by *Maximum Transmission Power* IE ~~exceeds the Maximum DL Power Capability of the Power Local Cell Group, exceeds the Maximum DL Power Capability of the Power Local Cell Group~~, the Node B shall consider the procedure as having failed and send a CELL RECONFIGURATION FAILURE message to the CRNC.

8.2.14 Cell Deletion

8.2.14.1 General

This procedure is used to delete a cell in ~~the~~ Node B.

8.2.14.2 Successful Operation

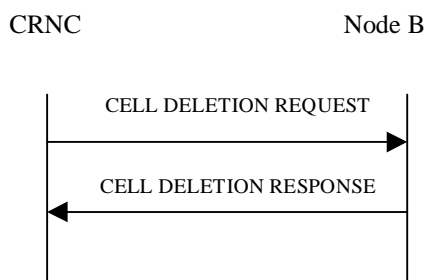


Figure 10: Cell Deletion procedure, Successful Operation

The procedure is initiated with a CELL DELETION REQUEST message sent from ~~the~~ CRNC to ~~the~~ Node B ~~using the Node B Control Port~~. Upon ~~R~~reception, the Node B shall remove the cell and any remaining common and dedicated channels within the cell. The states for the cell and the deleted common channels shall be set to Not Existing [6]. The Node B shall remove all Radio Links from the Cell and all Node B Communication Contexts that as a result do not have a Radio Link. The Node B shall also initiate release of the user plane transport bearers for the removed common and dedicated channels.

When the cell is deleted, the Node B shall send a CELL DELETION RESPONSE message as a response.

8.2.14.3 Unsuccessful Operation

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8.2.14.4 Abnormal Conditions

If the CELL DELETION REQUEST message includes a *C-ID* IE value that is not existing in ~~the~~ Node B, the Node B shall respond with the CELL DELETION RESPONSE message.

8.2.15 Resource Status Indication

8.2.15.1 General

This procedure is used in the following cases:

1. When a Local Cell becomes Existing at the Node B.
2. When a Local Cell is to be deleted in Node B, i.e. becomes ~~s~~ Not Existing.
3. When the capabilities of the Local Cell change at the Node B.
4. When a cell has changed its capability and/or its resource operational state at ~~the~~ Node B.
5. When common physical channels and/or common transport channels have changed their capabilities at ~~a~~~~the~~ Node B.

6. When a eCommunication eControl pPort has changed its resource operational state at the Node B.
7. When a Local Cell Group has changed its resource capability at the Node B.

Each of the above cases shall trigger a Resource Status Indication procedure and the RESOURCE STATUS INDICATION message shall contain the logical resources affected for that case and the cause value when applicable.

8.2.15.2 Successful Operation



Figure 21: Resource Status Indication procedure, Successful Operation

The procedure is initiated with a RESOURCE STATUS INDICATION message sent from the Node B to the CRNC using the Node B Control Port.

Local Cell Becomes Existing:

When a Local Cell becomes Existing at the Node B, the Node B shall make it available to the CRNC by sending a RESOURCE STATUS INDICATION message containing with the Indication Type IE set equal to a "No Failure" Indication, the Local Cell ID IE and the Add/Delete Indicator IE set equal to "Add".

When the capacity credits and consumption laws are shared between several Local Cells, the Node B includes the Local Cell Group ID IE for the Local Cell. If the Local Cell Group Information IE has not already been reported in a previous RESOURCE STATUS INDICATION message, the Node B shall include the capacity credits and the consumption laws in the Local Cell Group Information IE.

If the Local Cell IE contains both the DL or Global Capacity Credit IE and the UL Capacity Credit IE, then the internal resource capabilities of the Local Cell are modelled independently in the Uplink and Downlink direction. If the UL Capacity Credit IE is not present, then the internal resource capabilities of the Local Cell are modelled as shared resources between Uplink and Downlink. If the Local Cell Group Information IE contains both the DL or Global Capacity Credit IE and the UL Capacity Credit IE, then the internal resource capabilities of the Local Cell Group are modelled independently in the Uplink and Downlink direction. If the UL Capacity Credit IE is not present, then the internal resource capabilities of the Local Cell Group are modelled as shared resources between Uplink and Downlink.

[TDD - The Node B shall include the Reference Clock Availability IE within the Local Cell IE to indicate the availability of a Reference clock connected to the Local Cell, when a Local Cell is made available to the CRNC.]

If the Node B internal power resources are pooled for a group of Local Cells, the Node B shall include the Power Local Cell Group ID IE for the Local Cell. If the Power Local Cell Group Information IE has not already been reported in a previous RESOURCE STATUS INDICATION message, the Node B shall include this IE for the concerned Power Local Cell Group in this message. Furthermore, the sum of the Maximum DL Power Capability of all the Local Cells belonging to the same Power Local Cell Group shall not exceed the Maximum DL Power Capability of the concerned Power Local Cell Group.

Local Cell Deletion:

When a Local Cell is to be deleted in the Node B, i.e. becomes Not Existing, the Node B shall withdraw the Local Cell from the CRNC by sending a RESOURCE STATUS INDICATION message containing with the Indication Type IE set equal to a "No Failure" Indication, the Local Cell ID IE and the Add/Delete Indicator IE set equal to "Delete". The Node B shall not withdraw a previously configured cell at the Node B that the CRNC had configured using the Cell Setup procedure, until the CRNC has deleted that cell at the Node B using the Cell Delete procedure.

Capability Change of a Local Cell:

When the capabilities of a Local Cell change at the Node B, the Node B shall report the new capability by sending a RESOURCE STATUS INDICATION message containing with the Indication Type IE set equal to a "Service Impacting" Indication and the Local Cell ID IE.

The Node B shall include the *Minimum DL Power Capability* IE when it is known by the Node B.

If the **maximum** DL power capability **of the Local Cell** has changed, the new capability shall be indicated in the *Maximum DL Power Capability* IE.

If the DL capability for supporting the minimum spreading factor has changed, the new capability shall be indicated in the *Minimum Spreading Factor* IE.

[TDD - If the availability of the Reference clock connected to a Local Cell has changed, the new availability condition shall be indicated in the *Reference Clock Availability* IE.]

The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

If the internal resource capabilities of the Local Cell are affected, it shall be reported in the following way:

- If the internal resource capabilities of the Local Cell are modelled as shared resources between Uplink and Downlink, the new capacity shall be reported in the *DL or Global Capacity Credit* IE.
- If the internal resource capabilities of the Local Cell are modelled independently in the Uplink and Downlink direction, then the *DL or Global Capacity Credit* IE and the *UL Capacity Credit* IE shall be present in the RESOURCE STATUS INDICATION. **If the maximum DL power capability of the Local Cell is affected, this shall be reported using the *Maximum DL Power Capability* IE.**

Capability Change of a Cell:

When the capabilities and/or resource operational state of a cell changes at the Node B, the Node B shall report the new capability and/or resource operational state by sending a RESOURCE STATUS INDICATION message **containing with the *Indication Type* IE set equal to a "Service Impacting" *Indication***, the *C-ID* IE, the *Resource Operational State* IE and the *Availability Status* IE. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

Capability Change of a Common Physical Channel and/or Common Transport Channel:

The Node B shall not delete any common or dedicated channels, due to the cell being "Disabled". For all affected common and dedicated channels, the Node B shall report the impact to the CRNC with the relevant procedures.

When the capabilities and/or resource operational state of common physical channels and/or common transport channels have changed, the Node B shall report the new capability and/or resource operational state by sending a RESOURCE STATUS INDICATION message **containing with the *Indication Type* IE set equal to a "Service Impacting" *Indication***, the *Resource Operational State* IE and the *Availability Status* IE set to appropriate values for the affected channel(s). The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

When a power value for a common physical channel and/or a common transport channel becomes beyond the supported power value range due to a change in capability in **the Node Bs**, it shall be reported to the CRNC in the RESOURCE STATUS INDICATION message, with the *Resource Operational State* IE set to "Enabled", the *Availability Status* IE set to "Degraded" and the *Cause* IE set to "Power level not supported". Affected channels shall use the nearest power value that is supported.

Capability Change of a Communication Control Port:

When the resource operational state of a **eC**ommunication **eC**ontrol **pP**ort has changed, the Node B shall report the new resource operational state by sending a RESOURCE STATUS INDICATION message **containing with the *Indication Type* IE set equal to a "Service Impacting" *Indication*** and the *Communication Control Port ID* IE. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

Capability Change of a Local Cell Group:

When the resource capabilities of a Local Cell Group change at the Node B, the Node B shall report the new capability by sending a RESOURCE STATUS INDICATION message **containing with the *Indication Type* IE set equal to a "Service Impacting" *Indication*** and the *Local Cell Group Information* IE reporting the change. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to an appropriate value. If the RESOURCE STATUS INDICATION message contains both the *DL or Global Capacity Credit* IE and the *UL Capacity Credit* IE, then the internal resource capabilities of the Node B are modelled independently in the Uplink and Downlink direction. If the *UL*

Capacity Credit IE is not present, then the internal resource capabilities of the Node B are modelled as shared resources between Uplink and Downlink.

Capability Change of a Power Local Cell Group:

When the power capability of a Power Local Cell Group changes at the Node B, the Node B shall report the new capability by sending a RESOURCE STATUS INDICATION message with the *Indication Type* IE set equal to "Service Impacting" and the *Power Local Cell Group Information* IE reporting the change. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to an appropriate value. In this case, the Node B shall also include the *Maximum DL Power Capability* IE in the *Local Cell Information* IE for all the Local Cells belonging to the concerned Power Local Cell Group. Furthermore, the sum of the Maximum DL Power Capability of all the Local Cells belonging to the same Power Local Cell Group shall not exceed the Maximum DL Power Capability of the concerned Power Local Cell Group.

General:

When the RESOURCE STATUS INDICATION message is used to report an error, only one cause value for all reported objects can be sent in one message. When the RESOURCE STATUS INDICATION message is used to clear errors, only all errors for one object can be cleared per message. It is not possible to clear one out of several errors for one object.

8.2.15.3 Abnormal Conditions

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8.2.16 System Information Update

8.2.16.1 General

The System Information Update procedure performs the necessary operations in order for the Node B to apply the correct scheduling of and/or to include the appropriate contents to the system information segments broadcast on the BCCH.

8.2.16.2 Successful Operation

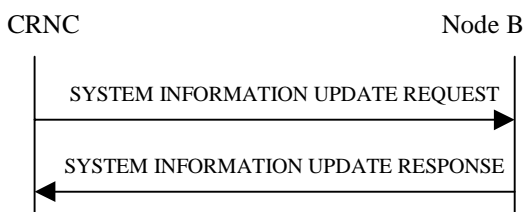


Figure 22: System Information Update procedure, Successful Operation

The procedure is initiated with a SYSTEM INFORMATION UPDATE REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

The Node B shall consider the requested updates to the BCCH schedule in the same order as the MIB/SB/SIB information is included in the SYSTEM INFORMATION UPDATE REQUEST message.

If the SYSTEM INFORMATION UPDATE REQUEST message includes the *BCCH Modification Time* IE, the updates to the BCCH schedule (possibly consisting of IB occurrence additions, IB occurrence deletions and IB occurrence contents updates) indicated in the SYSTEM INFORMATION UPDATE REQUEST message shall be applied by the Node B at the first time instance starting from the SFN value set by the *BCCH Modification Time* IE. If no *BCCH Modification Time* IE is included, the updates to the BCCH schedule shall be applied as soon as possible.

Information Block addition

If the SYSTEM INFORMATION UPDATE REQUEST message includes segments of a certain MIB/SB/SIB, the Node B shall assume that all segments for that Information Block are included in the message and ordered with increasing

Segment Index (starting from 0). For each included segment, segment type information and *IB SG POS* IE are also given in the SYSTEM INFORMATION UPDATE REQUEST message.

The Node B shall determine the correct cell system frame number(s) (SFN) for transmission of the segments of system information, from the scheduling parameters provided in the SYSTEM INFORMATION UPDATE REQUEST message. The SFN for transmitting the segments shall be determined by the *IB SG REP* IE and *IB SG POS* IE such that:

$$- \text{SFN mod IB_SG_REP} = \text{IB_SG_POS}$$

If the SYSTEM INFORMATION UPDATE REQUEST message contains Master Information Block (MIB) segments in addition to SIB or SB segments, the MIB segments shall first be sent in the physical channel by the Node B. Once these MIB segments have been sent in the physical channel, the updated SB/SIB segments shall then be sent in the physical channel.

Only if the inclusion of each new IB segment in the BCCH schedule leads to a valid segment combination according to [18], the Node B shall accept the system information update.

If the *SIB Originator* IE value is set to "Node B", the Node B shall create the SIB segment of the SIB type given by the *IB Type* IE and autonomously update the SIB segment and apply the scheduling and repetition as given by the *IB SG REP* IE and *IB SG POS* IE.

SIBs originating from the Node B can only be SIBs containing information that the Node B can obtain on its own.

Information Block deletion

If an IB Deletion is indicated in an instance of *MIB/SB/SIB information* IE in the SYSTEM INFORMATION UPDATE REQUEST message, the Node B shall delete the IB indicated by the *IB Type* IE and *IB OC ID* IE from the transmission schedule on BCCH.

Information Block update

If the SYSTEM INFORMATION UPDATE REQUEST message contains segments for an IB without *IB SG REP* IE and *IB SG POS* IE and there is already an IB in the BCCH schedule with the same IB Type and IB OC ID which is not requested to be deleted from the BCCH schedule by an IB deletion indicated in a *MIB/SB/SIB information* IE repetition present in the SYSTEM INFORMATION UPDATE REQUEST message before the IB segments are included, then the Node B shall only update the contents of the IB segments without any modification in segment scheduling.

If the Node B successfully completes the updating of the physical channel scheduling cycle according to the parameters given in the SYSTEM INFORMATION UPDATE REQUEST message, it shall respond to the CRNC with a SYSTEM INFORMATION UPDATE RESPONSE message.

8.2.16.3 Unsuccessful Operation

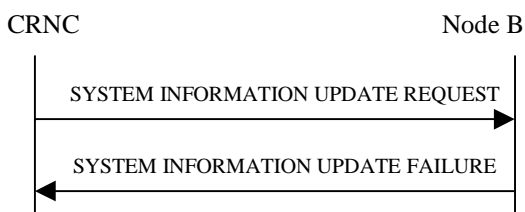


Figure 23: System Information Update procedure: Unsuccessful Operation

If the Node B is unable to update the physical channel scheduling cycle according to all the parameters given in the SYSTEM INFORMATION UPDATE REQUEST message, it shall respond with a SYSTEM INFORMATION UPDATE FAILURE message with an appropriate cause value. **No changes to the BCCH schedule are made in this case.**

The Node B shall not incorporate any of the requested changes into the physical channel scheduling cycle, and the previous system information configuration shall remain intact.

Typical cause values are:

Radio Network Layer Cause

- SIB Origination in Node B not Supported

Miscellaneous Cause

- Hardware failure
- Control Processing overload
- O&M Intervention

In the case of failure, the Node B shall not incorporate any of the requested changes into the physical channel scheduling cycle, and the previous system information configuration shall remain intact.

8.2.16.4 Abnormal Conditions

The Node B shall reject, with the cause value ""SIB origination in Node B not supported"", requests for Node B originated system information blocks that make use of a value tag.

The Node B shall reject the requested update with cause value "BCCH scheduling error" if:

- After having handled a certain *MIB/SB/SIB information* IE repetition, an illegal BCCH schedule results;
- If a *MIB/SB/SIB Information* ~~MIB/SB/SIB information~~ IE repetition includes an *IB SG REP* IE or an *IB SG POS* IE and there is already an IB in the BCCH schedule with the same IB Type and IB OC ID which is not requested to be deleted from the BCCH schedule by an IB deletion indicated in a *MIB/SB/SIB information* IE repetition present in the SYSTEM INFORMATION UPDATE REQUEST message before the IB addition is indicated. This rule shall apply even if the scheduling instructions in ~~*IB SG REP* IE and *IB SG POS* IE~~ were the same as the current scheduling instructions for the concerned IB;
- If a *MIB/SB/SIB Information* ~~MIB/SB/SIB information~~ IE repetition includes no *IB SG REP* IE and *IB SG POS* IE and there is no IB in the BCCH schedule with the same IB Type and IB OC ID;
- If a *MIB/SB/SIB Information* ~~MIB/SB/SIB information~~ IE repetition includes no *IB SG REP* IE and *IB SG POS* IE and there is already an IB in the BCCH schedule with the same IB Type and IB OC ID but it is requested to be deleted from the BCCH schedule by an IB deletion indicated in a *MIB/SB/SIB information* IE repetition present in the SYSTEM INFORMATION UPDATE REQUEST message before the IB addition is indicated.

8.2.17 Radio Link Setup

8.2.17.1 General

This procedure is used for establishing the necessary resources for a new Node B Communication Context in the Node B.

[FDD – The Radio Link Setup procedure is used to establish one or more radio links. The procedure establishes one or more DCHs on all radio links, and in addition, it can include the establishment of one or more DSCHs or an HS-DSCH on one radio link.]

[TDD – The Radio Link Setup procedure is used ~~to~~ establish one radio link including one or more transport channels. The transport channels can be a mixture of DCHs, DSCHs, and USCHs, or DCHs and an HS-DSCH, including also combinations where one or more transport channel types are not present.]

8.2.17.2 Successful Operation

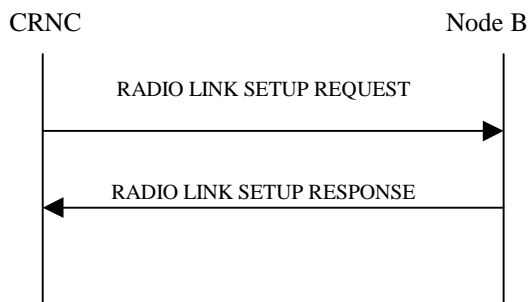


Figure 24: Radio Link Setup procedure, Successful Operation

The procedure is initiated with a RADIO LINK SETUP REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception of the RADIO LINK SETUP REQUEST message, the Node B shall reserve necessary resources and configure the new Radio Link(s) according to the parameters given in the message.

The Node B shall prioritise resource allocation for the RL(s) to be established according to Annex A.

Transport Channels Handling:

DCH(s):

[TDD – If the *DCH Information* IE is present, the Node B shall configure the new DCH(s) according to the parameters given in the message.]

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs, then, the Node B shall treat the DCHs in the *DCH Information* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.

[FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector IE QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]

For a set of co-ordinated DCHs, the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD - If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE, ref. [16].]

The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The received *Frame Handling Priority* IE specified for each Transport Channel should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new RL(s) has been activated.

[FDD – The *Diversity Control Field* IE indicates for each RL (except the first RL in the message) whether the Node B shall combine the concerned RL or not.

- If the *Diversity Control Field* IE is set to "May", then Node B shall decide for either of the alternatives.
- If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL.
- If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.

Diversity combining is applied to Dedicated Transport Channels (DCH), i.e. it is not applied to the DSCHs. When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with. If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.

[FDD – In the RADIO LINK SETUP RESPONSE message, the Node B shall indicate for each RL with the *Diversity Indication IE* Diversity Indication in the *RL Information Response IE* whether the RL is combined or not.

- In case of combining, only the *Reference RL ID IE* shall be included to indicate one of the existing RLs that the concerned RL is combined with.
- In case of not combining, the Node B shall include in the *DCH Information Response IE* in the RADIO LINK SETUP RESPONSE message the *Binding ID IE* and *Transport Layer Address IE* for the transport bearer to be established for each DCH of this RL.]

[TDD – The Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID IE* and *Transport Layer Address IE* for the transport bearer to be established for each DCH of this RL.]

In the case of a set of co-ordinated DCHs, the *Binding ID IE* and the *Transport Layer Address IE* shall be specified for only one of the DCHs in the set of co-ordinated DCHs.

DSCH(s):

If the *DSCH Information IE* is present, the Node B shall configure the new DSCH(s) according to the parameters given in the message.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *TFCI2 Bearer Information IE* then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received. – The Node B shall manage the time of arrival of these frames according to the values of ToAWS and ToAWE specified in the IE's. – The *Binding ID IE* and the *Transport Layer Address IE* for the new bearer to be set up for this purpose shall be returned in the RADIO LINK SETUP RESPONSE message.]

If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address IE* and *Binding ID IE* in the *DSCH Information IE*, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the DSCH.

The Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID IE* and the *Transport Layer Address IE* for the transport bearer to be established for each DSCH of this RL.

[TDD – USCH(s):

[TDD – If the *USCH Information IE* is present, the Node B shall configure the new USCH(s) according to the parameters given in the message.]

[TDD - If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address IE* and *Binding ID IE* in the *USCH Information IE*, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the USCH.]

[TDD – In case If the *USCH Information IE* is present, the Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID IE* and the *Transport Layer Address IE* for the transport bearer to be established for each USCH of this RL.]

HS-DSCH(s):

If the *HS-DSCH Information IE* is present, the Node B shall configure the new HS-DSCH resources according to the parameters given in the message.

[FDD – If the *HS-DSCH Information* IE and the *HS-PDSCH RL ID* IE are present, the Node B shall configure the new HS-DSCH resources in the radio link specified by the HS-PDSCH RL ID.]

In addition, the Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearers to be established for the HS-DSCH MAC-d flows of this RL.

If the *HS-DSCH-RNTI* IE is present, the Node B shall use the HS-DSCH RNTI value for HS-DSCH processing for the respective Node B Communication Context.

Physical Channels Handling:

[FDD – Compressed Mode]:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the information about the Transmission Gap Pattern Sequences to be used in the Compressed Mode Configuration. This Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or the Node B Communication Context is deleted.]

[FDD – If the *Downlink compressed mode method* IE in one or more Transmission Gap Pattern Sequence is set to "SF/2" in the RADIO LINK SETUP REQUEST message, the Node B shall use or not the alternate scrambling code as indicated for each DL Channelisation Code in the *Transmission Gap Pattern Sequence Code Information* IE.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE and the *Active Pattern Sequence Information* IE, the Node B shall use the information to activate the indicated Transmission Gap Pattern Sequence(s) in the new RL. The received *CM Configuration Change CFN* refers to the latest passed CFN with that value. The Node B shall treat the received *TGCFN* IEs as follows:]

- [FDD - If any received *TGCFN* IE has the same value as the received *CM Configuration Change CFN* IE, the Node B shall consider the concerned Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD - If any received *TGCFN* IE does not have the same value as the received *CM Configuration Change CFN* IE but the first CFN after the *CM Configuration Change CFN* with a value equal to the *TGCFN* IE has already passed, the Node B shall consider the concerned Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD - For all other Transmission Gap Pattern Sequences included in the *Active Pattern Sequence Information* IE, the Node B shall activate each Transmission Gap Pattern Sequence at the first CFN after the *CM Configuration Change CFN* with a value equal to the *TGCFN* IE for the Transmission Gap Pattern Sequence.]

[FDD – DL Code Information]:

[FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]

General:

[FDD – If the *Propagation Delay* IE is included, the Node B may use this information to speed up the detection of L1 synchronisation.]

[FDD – The *UL SIR Target* IE included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control.]

[1.28Mcps TDD – The *UL SIR Target* IE included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control according [19] and [21].]

[FDD – If the received *Limited Power Increase* IE is set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control.]

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP *REQUEST* message indicates that there shall be a hard split on the TFCI field but the *TFCI2 Bearer Information* IE is not included in the message, then the Node B shall transmit the TFCI2 field with zero power.]

[FDD - If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP *REQUEST* message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information* IE is included in the message, then the Node B shall transmit the TFCI2 field with zero power until Synchronization is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer (see ref. [24]).]

[FDD – If the RADIO LINK SETUP *REQUEST* message includes ~~the~~ *Length of TFCI2* IE, then the Node B shall apply the length of TFCI (field 2) indicated in the message.]

[FDD – If the RADIO LINK SETUP *REQUEST* message does not include the *Length of TFCI2* IE and the *Split Type* IE is present with the value "Hard", then the Node B shall assume the length of the TFCI (field 2) is 5 bits.]

Radio Link Handling:

[FDD – Transmit Diversity]:

[FDD – When the *Diversity Mode* IE is set to "STTD", "Closedloop mode1", or "Closedloop mode2", the Node B shall activate/deactivate the Transmit Diversity ~~to~~ *for* each Radio Link in accordance with the *Transmit Diversity Indication* IE]

DL Power Control:

[FDD – The Node B shall start any DL transmission using the initial DL power specified in the message on each DL DPCH of the RL until either UL synchronisation on the Uu *interface* is achieved for the RLS or Power Balancing is activated. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) and the power control procedure (see subclause 8.3.7), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP *REQUEST* message. During compressed mode, the $P_{SR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]

[FDD - If the *DPC Mode* IE is present in the RADIO LINK SETUP *REQUEST* message, the Node B shall apply the DPC mode indicated in the message, and be prepared that the DPC mode may be changed during the life time of the RL. If the *DPC Mode* IE is not present in the RADIO LINK SETUP *REQUEST* message, DPC mode 0 shall be applied (see ref. [10]).]

[TDD – The Node B shall determine the initial CCTrCH DL power for each CCTrCH by the following rule: If the *CCTrCH Initial DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall start any DL transmission on each CCTrCH using the initial CCTrCH DL power, as determined above, on each DL DPCH and on each Time Slot of the CCTrCH until the UL synchronisation on the Uu *interface* is achieved for the CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3), but shall always be kept within the maximum and minimum limit specified in the *RADIO LINK SETUP REQUEST* message.]

[TDD – If the [3.84Mcps TDD - *DL Time Slot ISCP Info* IE] or [1.28Mcps TDD - *DL Timeslot ISCP LCR* IE] is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged].

[FDD – If the received *Inner Loop DL PC Status* IE is set to "Active", the Node B shall activate the inner loop DL power control for all RLs. If *Inner Loop DL PC Status* IE is set to "Inactive", the Node B shall deactivate the inner loop DL power control for all RLs according to ref. [10].]

[FDD – If the RADIO LINK SETUP *REQUEST* message includes the *DL Power Balancing Information* IE and the *Power Adjustment Type* IE is set to "Common" or "Individual", the Node B shall activate the power balancing, if activation of power balancing by the RADIO LINK SETUP *REQUEST* message is supported ~~is~~ supported, according to subclause 8.3.7, using the *DL Power Balancing Information* IE. If the Node B starts

the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing shall be set to the indicated DL TX power level (if received) or the decided DL TX power level on each DL channelisation code of a RL.]

[FDD – If activation of power balancing by the RADIO LINK SETUP REQUEST message is supported by the Node B, the Node B shall include the *DL Power Balancing Activation Indicator IE* in the *RL Information Response IE* in the RADIO LINK SETUP RESPONSE message.]

General:

If the RADIO LINK SETUP REQUEST message includes the *RL Specific DCH Information IE*, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the DCH or the set of co-ordinated DCHs.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity IE* and the *S-Field Length IE*, the Node B shall activate SSDT, if supported, using the *SSDT Cell Identity IE* and *SSDT Cell Identity Length IE*.]

[FDD – Irrespective of SSDT activation, the Node B shall include in the RADIO LINK SETUP RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK SETUP REQUEST message requested SSDT activation and the RADIO LINK SETUP RESPONSE message indicates that the SSDT capability is supported for this RL, SSDT is activated in the Node B.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity for EDSCHPC IE*, the Node B shall activate enhanced DSCH power control, if supported, using the *SSDT Cell Identity fFor EDSCHPC IE* and *SSDT Cell Identity Length IE* as well as *Enhanced DSCH PC IE* in accordance with ref. [10] subclause 5.2.2. If the RADIO LINK SETUP REQUEST message includes both *SSDT Cell Identity IE* and *SSDT Cell Identity fFor EDSCHPC IE*, then the Node B shall ignore the value in *SSDT Cell Identity fFor EDSCHPC IE*. If the enhanced DSCH power control is activated and the TFCI power control in DSCH hard split mode is supported, the primary/secondary status determination in the enhanced DSCH power control is also applied to the TFCI power control in DSCH hard split mode.]

The Node B shall start reception on the new RL(s) after the RLs are successfully established.

[FDD – Radio Link Set Handling]:

[FDD – The *First RLS Indicator IE* indicates if the concerned RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator IE* shall be used by the Node B together with the value of the *DL TPC pPattern 01 eCount IE* which the Node B has received in the Cell Setup procedure, to determine the initial TPC pattern in the DL of the concerned RL and all RLs which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID IE* included in the RADIO LINK SETUP RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication eContext.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID IE* included in the RADIO LINK SETUP RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication eContext.]

[FDD – The UL out-of-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the maximum value of the parameters *N_OUTSYNC_IND* and *T_RLFAILURE*, and the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells supporting the radio links of the RL Set.]

Response Message:

If the RLs are successfully established, the Node B shall start reception on the new RL(s) and respond with a RADIO LINK SETUP RESPONSE message.

After sending of the RADIO LINK SETUP RESPONSE message the Node B shall continuously attempt to obtain UL synchronisation on the Uu interface and start reception on the new RL.

For each RL for which the *Delayed Activation* IE is not included in the RADIO LINK SETUP REQUEST message, the Node B shall:

- [FDD - start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16].]
- [TDD - start transmission on the new RL immediately as specified in [16].]

For each RL for which the *Delayed Activation* IE is included in the RADIO LINK SETUP REQUEST message, the Node B shall:

- if the *Delayed Activation* IE indicates "Separate Indication":
 - not start any DL transmission for the concerned RL on the Uu interface;
- if the *Delayed Activation* IE indicates "CFN":
 - [FDD – start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16], however never before the CFN indicated in the *Activation CFN* IE.]
 - [TDD – start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in [16].]

8.2.17.3 Unsuccessful Operation

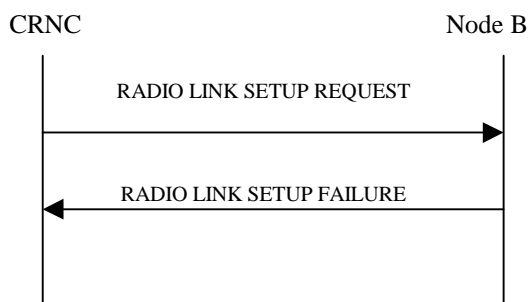


Figure 25: Radio Link Setup procedure: Unsuccessful Operation

If the establishment of at least one radio link is unsuccessful, the Node B shall respond with a RADIO LINK SETUP FAILURE message. The message contains the failure cause in the *Cause* IE.

[FDD – If some radio links were established successfully, the Node B shall indicate this in the RADIO LINK SETUP FAILURE message in the same way as in the RADIO LINK SETUP RESPONSE message. In this case, the Node B shall include the *Communication Control Port Id* IE in the RADIO LINK SETUP FAILURE message.]

Typical cause values are as follows:

Radio Network Layer Cause

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- Number of DL codes not supported
- Number of UL codes not supported
- UL SF not supported
- DL SF not supported
- Dedicated Transport Channel Type not supported
- Downlink Shared Channel Type not supported

- Uplink Shared Channel Type not supported
- CM not supported
- DPC mode change not supported
- Delayed Activation not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.17.4 Abnormal Conditions

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Active Pattern Sequence Information* IE, but the *Transmission Gap Pattern Sequence Information* IE is not present, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Radio Link Setup procedure as failed and shall respond with a RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCH Information* IE do not have the same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE included in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "Must", the Node B shall regard the Radio Link Setup procedure as failed and respond with the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Length of TFCI2* IE but the *TFCI signalling option* IE is set to "Normal", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK SETUP REQUEST message does not include the *Length of TFCI2* IE but the *Split Type* IE is set to "Logical", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Split Type* IE set to the value "Hard" and the *Length of TFCI2* IE set to the value "5", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Length of TFCI2* IE but the *TFCI signalling option* IE is set to "Normal", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message does not include the *Length of TFCI2* IE but the *Split type* IE is set to "Logical", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Split Type* IE set to the value "Hard" and the *Length of TFCI2* IE set to the value "5", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

8.2.18 Physical Shared Channel Reconfiguration

8.2.18.1 General

This procedure is used to assign HS-DSCH related resources to the Node B.

[TDD - This procedure is also used for handling PDSCH Sets and PUSCH Sets in the Node B, i.e.

- Adding new PDSCH Sets and/or PUSCH Sets,
- Modifying these, and
- Deleting them.]

8.2.18.2 Successful Operation

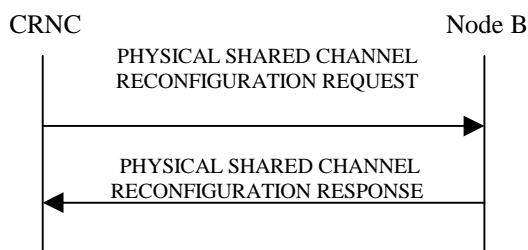


Figure 26: Physical Shared Channel Reconfiguration: Successful Operation

The procedure is initiated with a PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message sent from the CRNC to the Node B **using the Node B Control Port**.

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes an *SFN* IE, the Node B **will-shall** activate the new configuration on that specified SFN.

HS-DSCH Resources

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH and HS-SCCH Total Power* IE, the Node B shall not exceed this maximum transmission power on all HS-PDSCH and HS-SCCH codes in the cell. If a value has never been set or if the value of the *HS-PDSCH Total Power* IE is equal to or greater than the maximum transmission power of the cell the Node B may use all unused power for HS-PDSCH and HS-SCCH codes.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH and HS-SCCH Scrambling Code* IE, the Node B shall use this as the scrambling code for all HS-PDSCHs and HS-SCCHs. If a value has never been set, the Node B shall use the primary scrambling code for all HS-PDSCH and HS-SCCH codes.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH FDD Code Information* -IE, the Node B shall:

- If the *HS-PDSCH FDD Code Information* IE contains no codes, delete any existing HS-PDSCH resources from the cell.
- If the *HS-PDSCH FDD Code Information* IE contains one or more codes and HS-PDSCH resources are not currently configured in the cell, use this list as the range of codes for HS-PDSCH channels.
- If the *HS-PDSCH FDD Code Information* IE contains one or more codes and HS-PDSCH resources are currently configured in the cell, replace the current range of codes with this new range of codes for HS-PDSCH channels.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-SCCH FDD Code Information* IE, the Node B shall:

- If the *HS-SCCH FDD Code Information* IE contains no codes, delete any existing HS-SCCH resources from the cell.
- If the *HS-SCCH FDD Code Information* IE contains one or more codes and HS-SCCH resources are not currently configured in the cell, use this list of codes as the list of codes for HS-SCCH channels.
- If the *HS-SCCH FDD Code Information* IE contains one or more codes and HS-SCCH resources are currently configured in the cell, replace the current list of codes with this new list of codes for HS-SCCH channels.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-SCCH Maximum Power* IE, the Node B shall not exceed this power for each HS-SCCH code.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH TDD Information* IE, the Node B shall:

- If the *HS-PDSCH TDD Code Information* IE contains no codes, delete any existing HS-PDSCH resources from the cell.
- If the *HS-PDSCH TDD Code Information* IE contains one or more codes and HS-PDSCH resources are not currently configured in the cell, use this list as the list of codes for HS-PDSCH channels.
- If the *HS-PDSCH TDD Code Information* IE contains one or more codes and HS-PDSCH resources are currently configured in the cell, replace the current list of codes with this new list of codes for HS-PDSCH channels.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *Add to HS-SCCH Resource Pool* IE, the Node B shall add this resource to the HS-SCCH resource pool to be used to assign HS-SCCH sets.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify HS-SCCH Resource Pool* IEs and includes any of [3.84Mcps TDD - *TDD Channelisation Code* IE, *Midamble shift and burst type* IE, *Time Slot* IE], [1.28Mcps TDD - *TDD Channelisation Code LCR* IE, *Midamble shift LCR* IE, *Time Slot LCR* IE], for either HS-SCCH or HS-SICH channels, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Delete from HS-SCCH Resource Pool* IEs, the Node B shall delete these resources from the HS-SCCH resource pool.]

[TDD - PDSCH/PUSCH Addition]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be added, the Node B shall add these new sets to its PDSCH/PUSCH configuration.]

[TDD - PDSCH/PUSCH Modification]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be modified, and includes any of [3.84Mcps TDD - *TDD Channelisation Code* IE, *Midamble sShift and bBurst tType* IE, *Time Slot* IE], [1.28Mcps TDD - *TDD Channelisation Code LCR* IE, *Midamble sShift LCR* IE, *Time Slot LCR* IE], *TDD Physical Channel Offset* IE, *Repetition Period* IE, *Repetition Length* IE, or *TFCI pPresence* IE, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

[TDD - PDSCH/PUSCH Deletion]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be deleted the Node B shall delete these new sets to-from its PDSCH/PUSCH configuration.]

Response Message

HS-DSCH/HS-SCCH Resources

In the successful case involving HS-PDSCH or HS-SCCH resources, the Node B shall make these resources available to all the current and future HS-DSCH transport channels; and shall respond with PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE:

[TDD – PDSCH/PUSCH Addition/Modification/Deletion]

[TDD - In the successful case involving PDSCH/PUSCH addition, modification or deletion, the Node B shall add, modify and delete the PDSCH Sets and PUSCH Sets in the Common Transport Channel data base, as requested in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, and shall make these available to all the current and future DSCH and USCH transport channels,; and The Node B shall respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.]

8.2.18.3 Unsuccessful Operation

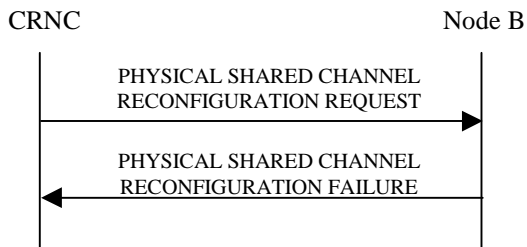


Figure 27: Physical Shared Channel Reconfiguration procedure: Unsuccessful Operation

If the Node B is not able to support all parts of the configuration, it shall reject the configuration of all the channels in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message. The Cause Value-IE shall be set to an appropriate value.

If the configuration was unsuccessful, the Node B shall respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message:

Typical cause values are as follows:

Radio Network Layer Cause

- Cell not available
- Node B Resources unavailable

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.18.4 Abnormal Conditions

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8.2.19 Reset

8.2.19.1 General

The purpose of the rReset procedure is to align the resources in the CRNC and the Node B in the event of an abnormal failure. The CRNC or the Node B may initiate the procedure.

8.2.19.2 Successful Operation

8.2.19.2.1 Reset Initiated by the CRNC

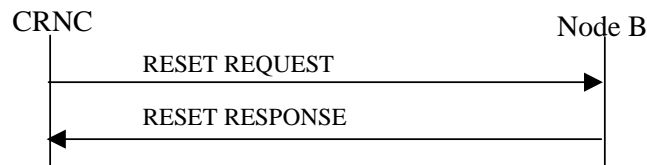


Figure 27A Reset procedure (CRNC to Node B), Successful Operation

The procedure is initiated with a RESET REQUEST message sent from the CRNC to the Node B **using the Node B Control Port**.

If the *Reset Indicator* IE is set to "Communication_Context", the Node B shall remove all the indicated Node B Communication Contexts (typically identified by a *Node B Communication Context ID* IE) and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

If the *Reset Indicator* IE is set to "Communication_Control_Port", the Node B shall remove all the Node B Communication Contexts controlled via the indicated Communication Control Port(s) and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

If the *Reset Indicator* IE is set to "Node B", the Node B shall remove all the Node B Communication Contexts within the Node B and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

8.2.19.2.2 Reset Initiated by the Node B

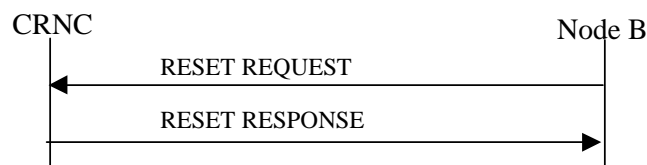


Figure 27B Reset procedure (Node B to CRNC), Successful Operation

The procedure is initiated with a RESET REQUEST message sent from the Node B to the CRNC **using the Node B Control Port**.

If the *Reset Indicator* IE is set to "Communication_Context", for all indicated CRNC Communication Contexts (indicated by a *CRNC Communication Context ID* IE), the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the indicated CRNC Communication Contexts. After clearing all related resources, the CRNC shall return the RESET RESPONSE message to the Node B.

If the *Reset Indicator* IE is set to "Communication_Control_Port", for all the CRNC Communication Contexts controlled via the indicated Communication Control Port(s), the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the CRNC Communication Contexts controlled via the indicated Communication Control Port(s). After clearing all related resources, the CRNC shall return the RESET RESPONSE message to Node B.

If the *Reset Indicator* IE is set to the "Node B", for all the CRNC Communication Contexts related to this Node B, the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the CRNC

Communication Contexts related to this Node B. After clearing all related resources, the CRNC shall return the RESET RESPONSE message to Node B.

8.2.19.3 Unsuccessful Operation

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8.2.19.4 Abnormal Conditions

If the RESET REQUEST message is received any ongoing procedure related to a CRNC Communication Context in the CRNC or Node B Communication Context in the Node B indicated (explicitly or implicitly) in the message shall be aborted.

8.2.20 Cell Synchronisation Initiation [TDD]

8.2.20.1 General

This procedure is used by a CRNC to request the transmission of cell synchronisation bursts and/or to start measurements on cell synchronisation bursts in a Node B. Note: The term "cell synchronisation burst" is used as a generic term which refers to the synchronisation bursts used in the two TDD chip rate options. A "cell synchronisation burst" is a [3.84Mcps TDD – cell synchronisation burst sent in the PRACH time slots] or a [1.28Mcps TDD - SYNC_DL code sent in the DwPTS], respectively.

8.2.20.2 Successful Operation

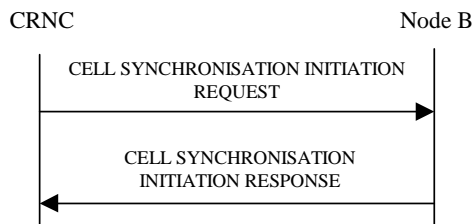


Figure 27C Cell Synchronisation Initiation procedure, Successful Operation

The procedure is initiated with a CELL SYNCHRONISATION INITIATION REQUEST message sent from the CRNC to the Node B using the Node B eControl pPort.

Upon reception, the Node B shall initiate the requested transmission according to the parameters given in the request and start the measurement on cell synchronisation bursts if requested.

Cell Sync Burst Transmission Initiation

When the Cell Sync Burst Transmission Initiation Information is present, the Node B shall configure the transmission of the cell synchronisation burst according to the parameters given in the CELL SYNCHRONISATION INITIATION REQUEST message. The *SFN* IE indicates the frame number when the cell shall start transmitting cell synchronisation bursts.

[3.84Mcps TDD - When the Cell Sync Burst Transmission Initiation Information is present and the "Frequency Acquisition" is indicated within the *Synchronisation Report Type* IE, the Node B shall first perform only frequency locking on received cell synchronisation bursts. Transmission of the indicated cell synchronisation bursts shall be started only if the frequency locking is performed successfully and "Frequency Acquisition completed" is reported to the RNC.]

[3.84Mcps TDD - Cell Sync Burst Measurement characteristics] [1.28Mcps TDD – SYNC_DL Code Measurement characteristics LCR]

When the [3.84Mcps TDD - Cell Sync Burst Measurement Initiation Information][1.28Mcps TDD – SYNC_DL Code Measurement Initiation Information LCR] is present, the Node B shall initiate measurements on the indicated cell synchronisation burst.

In case If the *SFN* IE is present, the Node B shall after measurement of the indicated cell synchronisation burst adjust the frame number of the indicated cell according to the *SFN* of the CELL SYNCHRONISATION INITIATION REQUEST message. This adjustment shall only apply to the late entrant cell at the late entrant phase.

Synchronisation Report characteristics

The *Synchronisation Report Characteristics* IE indicates how the reporting of the cell synchronisation burst measurement shall be performed. Whenever the Cell Synchronisation Initiation procedure is initiated, only the "Frequency Acquisition completed" or "Frame related" report characteristics type shall apply.

[3.84Mcps TDD - If the *Synchronisation Report characteristics type* IE is set to "Frequency Acquisition completed", the Node B shall signal completion of frequency acquisition to the RNC when locking is completed.]

If the *Synchronisation Report characteristics type* IE is set to "Frame related", the Node B shall report the result of the cell synchronisation burst measurement after every measured frame.

Response message

If the Node B was able to initiate the cell synchronisation burst transmission and/or measurement requested by the CRNC it shall respond with the CELL SYNCHRONISATION INITIATION RESPONSE message sent over the Node B eControl pPort.

8.2.20.3 Unsuccessful Operation

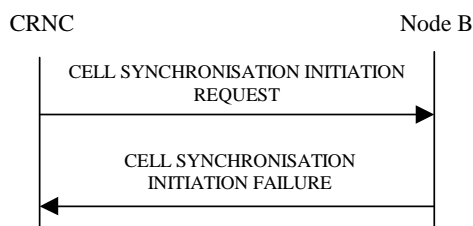


Figure 27D Cell Synchronisation Initiation procedure, Unsuccessful Operation

If the requested transmission or measurement on cell synchronisation bursts cannot be initiated, the Node B shall send a CELL SYNCHRONISATION INITIATION FAILURE message over the Node B control port. The message shall include the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell Synchronisation not supported

- Power level not supported
- Measurement Temporarily not Available
- Frequency Acquisition not supported

Miscellaneous Cause

- O&M Intervention
- HW failure

8.2.20.4 Abnormal Conditions

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8.2.21 Cell Synchronisation Reconfiguration [TDD]

8.2.21.1 General

This procedure is used by a CRNC to reconfigure the transmission of cell synchronisation bursts and/or to reconfigure measurements on cell synchronisation bursts in a Node B.

8.2.21.2 Successful Operation

8.2.21.2.1 General

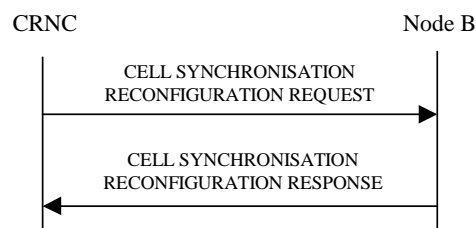


Figure 27E Cell Synchronisation Reconfiguration procedure, Successful Operation

The procedure is initiated with a CELL SYNCHRONISATION RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B **eControl pPort**.

Upon reception, the Node B shall reconfigure the cell **synchronisation** burst transmission and/or measurements according to the parameters given in the request.

8.2.21.2.2 Cell Sync Burst Schedule

Within the CELL SYNCHRONISATION RECONFIGURATION REQUEST message first the schedule for the steady state phase is fixed. I.e. the number of cycles per SFN period is defined with the same schedule. For each cycle, the number of repetitions is defined according to following equations:

Cycle length: $4096 / \text{value of } \textit{the-Number Of Cycles Per SFN Period} \textit{ IE-Number of cycles per SFN period}^2$

Repetition period: $\text{Cycle length} / \text{value of } \textit{Number Of Repetitions Per Cycle Period} \textit{ IE-Number of repetitions per cycle period}^2$

Cell Sync Frame number is calculated by:

$$\text{SFN} = \text{floor}((k-1) * \text{Cycle length} + (i-1) * \text{Repetition period})$$

$$k = \{1, 2, 3, .. \text{Number of cycle per SFN period}\}$$

$$i = \{1, 2, 3, .. \text{Cell Sync Frame number within cycle period}\}$$

8.2.21.2.3 [1.28Mcps TDD – SYNC_DL Code Schedule]

Within the CELL SYNCHRONISATION RECONFIGURATION REQUEST message first the schedule for the steady state phase is fixed. The "schedule" includes

- the list of frame numbers SFN within the SFN period where synchronisation burst transmission or reception takes place, i.e. the "synchronisation frames", and
- the associated actions (burst transmission, reception, averaging, reporting etc) to be performed for synchronisation purpose by the Node B at each of these SFNs.

Within the synchronisation frames, only the first subframe shall be used for sending or receiving a synchronisation burst in the DwPTS while in the second subframe, normal operation continues.

In case of 1.28Mcps TDD, the synchronisation schedule includes the option of averaging of measured correlation results within the Node B over a sequence of measurements, for increasing the reliability of the Time of Arrival measurement obtained from the correlation results. For this purpose, the concept of "subcycles" has been introduced: Each Synchronisation Cycle is divided into "subcycles" where in each subcycle, the same set of SYNC_DL transmissions and receptions is performed, and averaging takes place over all the subcycles within a Synchronisation Cycle. Since the list of actions (transmission, measurements etc) is the same in each subcycle, and the subcycles are repeated to make up a cycle, and the cycles make up an SFN period, the full list of actions is derived by the actions specified for a subcycle.

The full list of SFNs which make up the synchronisation schedule within the SFN period are calculated in Node B and RNC autonomously based on the following parameters included in the CELL SYNCHRONISATION RECONFIGURATION REQUEST message: "Number of cycles per SFN period", "Number of subcycles per cycle period", and "Number of repetitions per cycles period", along the following equations:

Cycle length: $4096 / \text{value of } \textit{the-Number Of Cycles Per SFN Period} \textit{ IE-Number of cycles per SFN period}^2$

Subcycle length: $\text{Cycle length} / \text{value of } \textit{the-Number Of Subcycles Per Cycle Period} \textit{ IE-Number of subcycles per cycle period}^2$

Repetition period: $\text{Subcycle length} / \text{value of } \textit{Number Of Repetitions Per Cycle Period} \textit{ IE-Number of repetitions per cycle period}^2$

$$\text{SFN} = \text{floor}((k-1) * \text{Cycle length} + (j-1) * \text{Subcycle length} + (i-1) * \text{Repetition period})$$

$$k = \{1, 2, 3, .. \text{Number of cycle per SFN period}\}$$

$$j = \{1, 2, 3, .. \text{Number of subcycles per cycle}\}$$

$$i = \{1, 2, 3, .. \text{Number of repetitions per cycle period}\}$$

Note that if the *Number of Subcycles per Cycle* IE is equal to 1, then the subcycles are identical to the "Synchronisation Cycles".

If the *Number of Subcycles per Cycle* IE is included in the CELL SYNCHRONISATION RECONFIGURATION REQUEST [TDD] message, then the Node B shall apply this number for dividing the Synchronisation Cycles in Subcycles. If the IE is not present, then the Node B shall assume that there is one subcycle per synchronisation cycle only, which is identical to the synchronisation cycle.

Averaging is performed as follows:

- From each SYNC_DL code being received according to the schedule, the Node B shall calculate a "correlation function" by matching the received data with the respective expected code.
- Therefore the set of measurements within one subcycle provides a set of "correlation functions".
- The set of correlation functions of the first subcycle within a synchronisation cycle is stored in an averaging memory.
- The sets of correlation functions of the subsequent subcycles within a synchronisation cycle are combined with the available contents of the "averaging memory", to produce an average over all the sets of correlation functions within a synchronisation cycle.
- At the end of a synchronisation cycle, the Time-of-Arrival measurements for that synchronisation cycle are obtained by evaluating the final set of correlation functions.

These Time-of-Arrival measurements, together with associated SIR values obtained from the averaged correlation functions, are included in a Measurement Report to the RNC, according to a measurement reporting plan.

In addition, the Time-of-Arrival measurements may optionally be used for autonomous self-adjustment of the timing of the respective cell.

8.2.21.2.4 [3.84Mcps TDD - Cell Sync Burst Transmission Reconfiguration] [1.28Mcps TDD – SYNC_DL Code Transmission Reconfiguration]

When the [3.84Mcps TDD - Cell Sync Burst Transmission Reconfiguration Information] [1.28Mcps TDD – SYNC_DL Code Transmission Reconfiguration Information LCR] is present, the Node B shall reconfigure the transmission of the [3.84Mcps TDD - cell synchronisation burst] [1.28Mcps TDD - SYNC_DL Code] according to the parameters given in the CELL SYNCHRONISATION RECONFIGURATION REQUEST message.

[3.84Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *Cell Sync Burst Code* IE, the Node B shall reconfigure the synchronisation code in the cell according to the *Cell Sync Burst Code* IE value.]

[3.84Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *Cell Sync Burst Code Shift* IE, the Node B shall reconfigure the synchronisation code shift in the cell according to the *Cell Sync Burst Code Shift* IE value.]

[3.84Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *DL Transmission Power* IE, the Node B shall reconfigure the DL transmission power of the cell synchronisation burst in the cell according to the *DL Transmission Power* IE value.]

[1.28Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *DwPCH Power* IE, the Node B shall store the DwPCH power according to the *DwPCH Power* IE value. For the duration of those subsequent transmissions of the DwPCH which are specifically for the purpose of Node B synchronisation the power of the DwPCH shall be set to the stored power. During subsequent transmissions of the DwPCH which are for normal operation the power of the DwPCH shall assume its normal level.]

8.2.21.2.5 [3.84Mcps TDD - Cell Sync Burst Measurement Reconfiguration] [1.28Mcps TDD – SYNC_DL Code Measurement Reconfiguration]

When the [3.84Mcps TDD - Cell Sync Burst Measurement Reconfiguration Information] [1.28Mcps TDD - Cell SYNC_DL Code Measurement Reconfiguration Information LCR] is present, the Node B shall reconfigure the [3.84Mcps TDD - cell synchronisation burst] [1.28Mcps TDD - SYNC_DL Code] measurements according to the parameters given in the message.

If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the [3.84Mcps TDD -Cell Sync Burst Measurement Information] [1.28Mcps TDD – SYNC_DL Code Measurement Information LCR], the

measurements shall apply on the individual [3.84Mcps TDD - cell synchronisation bursts] [1.28Mcps TDD - SYNC_DL Codes] -on the requested Sync Frame number.

[1.28Mcps TDD - When the *Propagation Delay Compensation* IE is present in the Cell Sync Burst Measurement Information, the Node B shall, if supported, perform the following functions: (1) use the respective SYNC_DL measurement (after potential averaging) to perform the self-adjustment of the respective cell's timing at the end of a Synchronisation Cycle; (2) include the *Accumulated Clock Update* IE in the CELL SYNCHRONISATION REPORT message, to report the total accumulated amount of timing adjustments since the last report to the RNC. This Accumulated Clock Update value shall also include the adjustments which may have been performed by explicit order from the RNC in the CELL SYNCHRONISATION ADJUSTMENT REQUEST message. The times for self-adjustment at the end of a synchronisation cycle shall be independent from the measurement reporting characteristics; the Accumulated Adjustment values shall be included in the CELL SYNCHRONISATION REPORT messages without influencing the frequency of measurement reporting.]

If the *Synchronisation Report Type* IE is provided, the measurement reporting shall apply according the parameter given in the message.

Synchronisation Report characteristics

The *Synchronisation Report Characteristics* IE indicates how the reporting of the cell synchronisation burst measurement shall be performed.

If the *Synchronisation Report eCharacteristics #Type* IE is set to "*Frame related*", the Node B shall report the result of the cell synchronisation burst measurement after every measured frame.

If the *Synchronisation Report eCharacteristics #Type* IE is set to "*SFN period related*", the Node B shall report the result of the cell synchronisation burst measurements after every SFN period.

If the *Synchronisation Report eCharacteristics #Type* IE is set to "*Cycle length related*", the Node B shall report the result of the cell synchronisation burst measurements after every cycle length within the SFN period.

If the *Synchronisation Report eCharacteristics #Type* IE is set to "*Threshold exceeding*", the Node B shall report the result of the [3.84Mcps TDD - cell synchronisation burst] [1.28Mcps TDD - SYNC_DL Code] measurement when the [3.84Mcps TDD - cell synchronisation burst timing] [1.28Mcps TDD – SYNC_DL Code timing] rises or falls more than the requested threshold value compared to the arrival time in synchronised state which is represented by the [3.84Mcps TDD - *Cell Sync Burst Arrival Time* IE] [1.28Mcps TDD – *SYNC_DL Code ID Arrival Time* IE].

Response message

If the Node B was able to reconfigure the cell synchronisation burst transmission and/or measurement requested by the CRNC, it shall respond with the CELL SYNCHRONISATION RECONFIGURATION RESPONSE message sent over the Node B eControl pPort.

8.2.21.3 Unsuccessful Operation

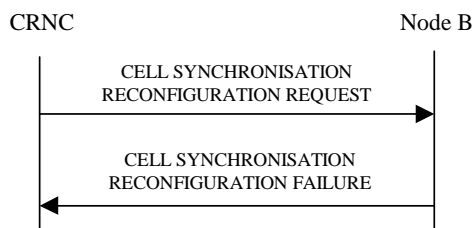


Figure 27F Cell Synchronisation Reconfiguration procedure, Unsuccessful Operation

If the Node B cannot reconfigure the requested transmission or measurement on [3.84Mcps TDD - cell synchronisation burst] [1.28Mcps TDD – SYNC_DL Code], the CELL SYNCHRONISATION RECONFIGURATION FAILURE message shall be sent to the CRNC. The message shall include the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell Synchronisation not supported

- Power level not supported
- Measurement Temporarily not Available

Miscellaneous Cause

- O&M Intervention
- HW failure

8.2.21.4 Abnormal Conditions

-

8.2.22 Cell Synchronisation Reporting [TDD]

8.2.22.1 General

This procedure is used by a Node B to report the result of [3.84Mcps TDD - cell synchronisation burst] [1.28Mcps TDD - SYNC_DL Code] measurements requested by the CRNC with the Cell Synchronisation Initiation or Cell Synchronisation Reconfiguration procedure.

8.2.22.2 Successful Operation

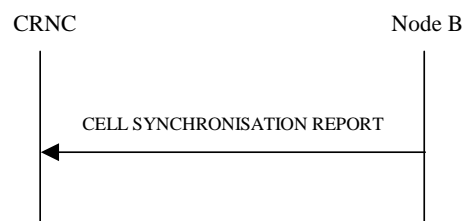


Figure 27G Cell Synchronisation Reporting procedure, Successful Operation

If the requested synchronisation measurement reporting criteria are met, the Node B shall initiate a Cell Synchronisation Reporting procedure. The CELL SYNCHRONISATION REPORT message shall use the Node B ϵ Control pPort.

In the steady state phase when several [3.84Mcps TDD - cell synchronisation bursts] [1.28Mcps TDD - SYNC_DL Codes] shall be measured per Sync Frame number, the sequence of the reported measured values shall be the same as defined in the Cell Synchronisation Reconfiguration procedure.

[1.28Mcps TDD - The Node B shall, -if supported,- include the *Accumulated Clock #Update* IE in the CELL SYNCHRONISATION REPORT message whenever the RNC has included at least one instance of the *Propagation Delay Compensation* IE in the CELL SYNCHRONISATION RECONFIGURATION REQUEST message. The *Accumulated Clock #Update* IE shall include the accumulated timing adjustment which has been done as commanded by the RNC, as well as by self-adjustment, since the last *Accumulated Clock #Update* IE report.]

If the achieved measurement accuracy does not fulfil the given accuracy requirement defined in [23], the Cell Sync Burst not available shall be reported.

8.2.22.3 Abnormal Conditions

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8.2.23 Cell Synchronisation Termination [TDD]

8.2.23.1 General

This procedure is used by the CRNC to terminate a [3.84Mcps TDD - cell synchronisation burst] [1.28Mcps TDD - SYNC_DL Code] transmission or measurement previously requested by the Cell Synchronisation Initiation procedure or Cell Synchronisation Reconfiguration procedure.

8.2.23.2 Successful Operation



Figure 27H Cell Synchronisation Termination procedure, Successful Operation

This procedure is initiated with a CELL SYNCHRONISATION TERMINATION REQUEST message, sent from the CRNC to the Node B using the Node B eControl pPort.

Upon reception, the Node B shall terminate transmission of [3.84Mcps TDD - cell synchronisation bursts or reporting of cell synchronisation burst measurements] [1.28Mcps TDD - SYNC_DL Codes or reporting of -SYNC_DL Code measurements] corresponding to the CSB Transmission Id or CSB Measurement Id.

8.2.23.3 Abnormal Conditions

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8.2.24 Cell Synchronisation Failure [TDD]

8.2.24.1 General

This procedure is used by the Node B to notify the CRNC that a synchronisation burst transmission or synchronisation measurement procedure can no longer be supported.

8.2.24.2 Successful Operation

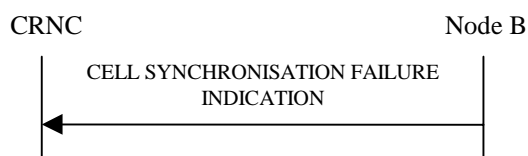


Figure 27I Cell Synchronisation Failure procedure, Successful Operation

This procedure is initiated with a CELL SYNCHRONISATION FAILURE INDICATION message, sent from the Node B to the CRNC using the Node B eControl pPort, to inform the CRNC that a previously requested transmission or measurement on [3.84Mcps TDD - cell synchronisation bursts] [1.28Mcps TDD - SYNC_DL Codes] can no longer be supported.

8.2.24.3 Abnormal Conditions

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8.2.25 Cell Synchronisation Adjustment [TDD]

8.2.25.1 General

The purpose of Cell Synchronisation Adjustment procedure is to allow the CRNC to adjust the timing of the radio transmission of a cell within a Node B for time alignment.

8.2.25.2 Successful Operation

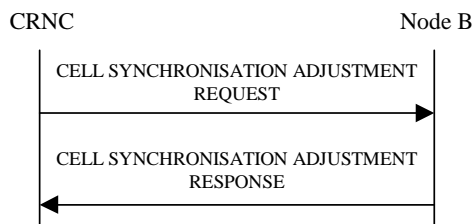


Figure 27J Cell Synchronisation Adjustment, Successful Operation

This procedure is initiated with a CELL SYNCHRONISATION ADJUSTMENT REQUEST message sent by the CRNC to the Node B using the Node B *e*Control *p*Port.

Upon reception, the Node B adjusts its timing according to the parameters given in the message.

If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *Frame Adjustment +Value* IE the Node B shall apply the frame adjustment in the cell according to the *Frame Adjustment +Value* IE value.

If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *Timing Adjustment +Value* IE the Node B shall apply the timing adjustment in the cell according to the *Timing Adjustment +Value* IE value.

[3.84Mcps TDD - If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *DL Transmission Power* IE, the Node B shall apply the transmission power of the cell synchronisation burst according to the *DL Transmission Power* IE value.]

[1.28Mcps TDD - If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *DwPCH Power* IE, the Node B shall store the DwPCH power according to the *DwPCH Power* IE value. For the duration of those subsequent transmissions of the DwPCH which are specifically for the purpose of Node B synchronisation the power of the DwPCH shall be set to the stored power. During subsequent transmissions of the DwPCH which are for normal operation the power of the DwPCH shall assume its normal level.]

If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *SFN* IE, the Node B shall apply the synchronisation adjustment starting with the SFN number indicated in the message.

When the cell synchronisation adjustment is successfully done by the Node B, the Node B shall respond with a CELL SYNCHRONISATION ADJUSTMENT RESPONSE message.

8.2.25.3 Unsuccessful Operation

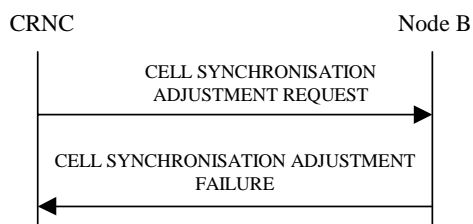


Figure 27K Cell Synchronisation Adjustment, Unsuccessful Operation

If the Node B cannot perform the indicated cell synchronisation adjustment due to hardware failure or other problem it shall send the CELL SYNCHRONISATION ADJUSTMENT FAILURE as a response.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell Synchronisation Adjustment not supported
- Power level not supported

Miscellaneous Cause

- O&M Intervention
- HW failure

8.2.25.4 Abnormal Conditions

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8.2.26 Information Exchange Initiation

8.2.26.1 General

This procedure is used by a CRNC to request the initiation of information provisioning from a Node B.

8.2.26.2 Successful Operation

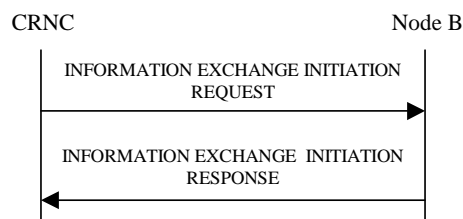


Figure 27L: Information Exchange Initiation procedure, Successful Operation

The procedure is initiated with the INFORMATION EXCHANGE INITIATION REQUEST message sent from the CRNC to the Node B using the Node B eControl pPort.

Upon reception, the Node B shall provide the requested information according to the *Information Type Item* IE. Unless specified below, the meaning of the parameters are given in other specifications.

Information Report Characteristics

The *Information Report Characteristics* IE indicates how the reporting of the information shall be performed.

If the *Information Report Characteristics* IE is set to "On Demand", the Node B shall report the requested information immediately.

If the *Information Report Characteristics* IE is set to "Periodic", the Node B shall periodically initiate the Information Reporting procedure for all the requested information, with the requested reporting frequency.

If the *Information Report Characteristics* IE is set to "On Modification", the Node B shall immediately report the requested information and then shall initiate the Information Reporting procedure in accordance to the following conditions related to the *Information Type* IE:

- 1) If the *Information Type Item* IE is set to "DGPS Corrections", the Node B shall initiate the Information Reporting procedure when either the PRC has drifted from the previously reported value more than the threshold indicated in the *PRC Deviation* IE or a change has occurred in the IODE.

- 2) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Navigation Model & Time Recovery", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred regarding either the IODC or the list of visible satellites, identified by the *SatID* IEs.
- 3) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Ionospheric Model", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- 4) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS UTC Model", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred in the *t_ot* parameter.
- 5) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Almanac", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- 6) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Real-Time Integrity", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.

Response message

If the Node B was able to initiate the information provision requested by the CRNC, it shall respond with the INFORMATION EXCHANGE INITIATION RESPONSE message sent over the Node B control port. The message shall include the same Information Exchange ID that was included in the INFORMATION EXCHANGE REQUEST message. When the *Report Characteristics* IE is set to "On-Demand" or "On Modification" or "Periodic", the INFORMATION EXCHANGE INITIATION RESPONSE message shall contain the requested data.

8.2.26.3 Unsuccessful Operation

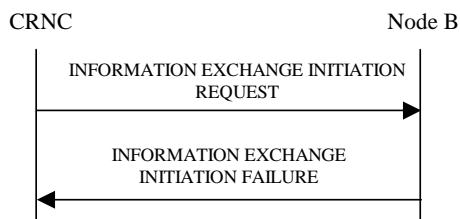


Figure 27M: Information Exchange Initiation procedure, Unsuccessful Operation

If the Information Type Item received in the *Information Type Item* IE indicates a type of information that cannot be provided, the Node B shall regard the Information Exchange Initiation procedure as failed.

If the requested information provision cannot be initiated, the Node B shall send the INFORMATION EXCHANGE INITIATION FAILURE message over the Node B control port. The message shall include the same Information Exchange ID that was used in the INFORMATION EXCHANGE INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Information temporarily not available.
- Information Provision not supported for the object.

8.2.27.4 Abnormal Conditions

-If the *Information Report Characteristics* IE is set to "*On Modification*", and the *Information Type Item* IE is set to "*DGPS Corrections*", but the *Information Threshold* IE is not received in the INFORMATION EXCHANGE INITIATION REQUEST message, the Node B shall regard the Information Exchange Initiation procedure as failed.

8.2.27 Information Reporting

8.2.27.1 General

This procedure is used by a Node B to report the information requested by the CRNC with the Information Exchange Initiation procedure.

8.2.27.2 Successful Operation

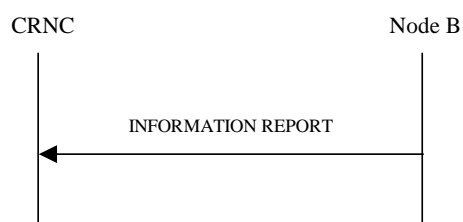


Figure 27N: Information Reporting procedure, Successful Operation

If the requested information reporting criteria are met, the Node B shall initiate the Information Reporting procedure. The INFORMATION REPORT message shall use the Node B *eControl pPort*. Unless specified below, the meaning of the parameters are given in other specifications.

The *Information Exchange ID* IE shall be set to the Information Exchange ID provided by the CRNC when initiating the Information Exchange with the Information Exchange Initiation procedure.

The *Requested Data Value* IE shall include at least one IE containing the data to be reported.

8.2.27.3 Abnormal Conditions

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8.2.28 Information Exchange Termination

8.2.28.1 General

This procedure is used by the CRNC to terminate the provision of information previously requested by the Information Exchange Initiation procedure.

8.2.28.2 Successful Operation



Figure 27O: Information Exchange Termination procedure, Successful Operation

This procedure is initiated with an INFORMATION EXCHANGE TERMINATION REQUEST message, sent from the CRNC to the Node B using the Node B *eControl pPort*.

Upon reception, the Node B shall terminate the provision of information corresponding to the Information Exchange ID.

8.2.28.3 Abnormal Conditions

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8.2.29 Information Exchange Failure

8.2.29.1 General

This procedure is used by the Node B to notify the CRNC that information previously requested by the Information Exchange Initiation procedure can no longer be reported.

8.2.29.2 Successful Operation

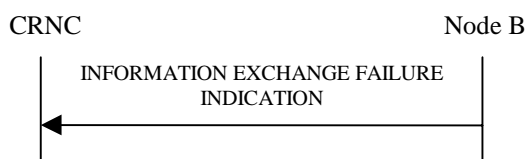


Figure 27P: Information Exchange Failure procedure, Successful Operation

This procedure is initiated with the INFORMATION EXCHANGE FAILURE INDICATION message, sent from the Node B to the CRNC using the Node B *e*Control *p*Port, to inform the CRNC that information previously requested by the Information Exchange Initiation procedure can no longer be reported. The message shall include the same Information Exchange ID that was used in the INFORMATION EXCHANGE INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

8.3 NBAP Dedicated Procedures

8.3.1 Radio Link Addition

8.3.1.1 General

This procedure is used for establishing the necessary resources in the Node B for one or more additional RLS towards a UE when there is already a Node B *e*Communication *e*Context for this UE in the Node B.

The Radio Link Addition procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.1.2 Successful Operation

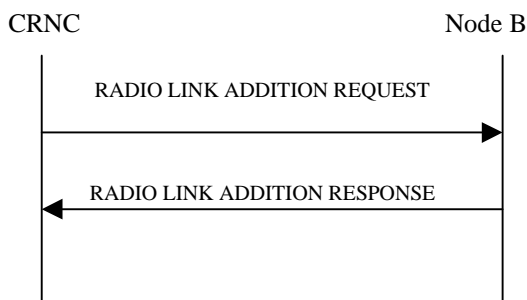


Figure: 28 Radio Link Addition procedure, Successful Operation

The procedure is initiated with a RADIO LINK ADDITION REQUEST message sent from the CRNC to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon reception, the Node B shall reserve the necessary resources and configure the new RL(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be established according to Annex A.

Physical Channels Handling:

[TDD – If the *UL DPCH Information* IE is present, the Node B shall configure the new UL DPCH(s) according to the parameters given in the message.]

[TDD – If the *DL DPCH Information* IE is present, the Node B shall configure the new DL DPCH(s) according to the parameters given in the message.]

[FDD – Compressed Mode]:

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Compressed Mode Deactivation Flag* IE with value "Deactivate", the Node B shall not activate any compressed mode pattern in the new RLs. In all the other cases (Flag set to "Maintain Active" or not present), the ongoing compressed mode (if existing) shall be applied also to the added RLs.]

[FDD- If the RADIO LINK ADDITION REQUEST message contains the *Transmission Gap Pattern Sequence Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated for each DL Channelisation Code for which the *Transmission Gap Pattern Sequence Code Information* IE is set to "Code Change".]

[FDD – DL Code Information]:

[FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to ref. [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]

[TDD – CCTrCH Handling]:

[TDD – If the *UL CCTrCH Information* IE is present, the Node B shall configure the new UL CCTrCH(s) according to the parameters given in the message.]

[TDD – If the *DL CCTrCH Information* IE is present, the Node B shall configure the new DL CCTrCH(s) according to the parameters given in the message.]

Radio Link Handling:

Diversity Combination Control:

The *Diversity Control Field* IE indicates for each RL whether the Node B shall combine the new RL with existing RL(s) or not.

- If the *Diversity Control Field* IE is set to "May", the Node B shall decide for any of the alternatives.
- If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL.
- If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.

When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with. ~~If the *Diversity Control Field* IE is set to "Must not" the Node B shall not combine the RL with any other existing RL.~~

In the case of combining an RL with existing RL(s), the Node B shall indicate with the *Diversity Indication in the RL Information Response IE* in the RADIO LINK ADDITION RESPONSE message with the *Diversity Indication* that the RL is combined. In this case, the *RL ID IE* Reference-RL ID shall be included to indicate one of the existing RLs that the new RL is combined with.

In the case of not combining an RL with existing RL(s), the Node B shall indicate **with the Diversity Indication in the RL Information Response IE** in the RADIO LINK ADDITION RESPONSE message **with the Diversity Indication** that no combining is done. In this case, the Node B shall include **in the DCH Information Response IE** both the **Transport Layer Address IE Transport Layer Address** and the **Binding ID IE binding ID** for the transport bearer to be established for each DCH, [TDD – DSCH, USCH] of the RL in the RADIO LINK ADDITION RESPONSE message.

In the case of **a set of** co-ordinated DCHs, the **Binding ID IE binding ID** and the **Transport Layer Address IE transport address** shall be included for only one of the **DCHs in a set of** coordinated DCHs.

[TDD – The Node B shall include in the RADIO LINK ADDITION RESPONSE message both the *Transport Layer Address IE* and the *Binding ID IE* for the transport bearer to be established for each DSCH and USCH.]

[FDD – Transmit Diversity]:

[FDD – When **the Diversity Mode IE** is **set to "STTD", "Closedloop mode1"**, or "*Closedloop mode2*", the Node B shall activate/deactivate the Transmit Diversity **tofor** each Radio Link in accordance with **the Transmit Diversity Indication IE**.]

[FDD – When **the Transmit Diversity Indicator IE** is present, **the** Node B shall activate/deactivate the Transmit Diversity **tofor** each new Radio Link in accordance with the *Transmit Diversity Indicator IE* and the already known diversity mode.]

DL Power Control:

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power IE*, the Node B shall apply the given power to the transmission on each DL DPCH of the RL when starting transmission until either UL synchronisation on the Uu **interface** is achieved for the RLS or Power Balancing is activated. If no *Initial DL Transmission pPower IE* is included, the Node B shall use any transmission power level currently used on already existing RL's for this **Node B Communication ContextUE**. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) with DPC MODE currently configured for the relevant Node B Communication Context and the downlink power control procedure (see **subclause 8.3.7**).]

[TDD – If the RADIO LINK ADDITION REQUEST message includes the [3.84Mcps TDD - *Initial DL Transmission Power IE*] [1.28Mcps TDD – *DL Time Slot ISCP Info LCR IE*], the Node B shall determine the initial CCTrCH DL power for each CCTrCH by the following rule: If the *CCTrCH Initial DL tTransmission Power IE* is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL tTransmission Power IE* included in the *RL Information IE*. The Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the CCTrCH when starting transmission until the UL synchronisation on the Uu **interface** is achieved for the CCTrCH. If no *Initial DL Transmission pPower IE* is included (even if *CCTrCH Initial DL tTransmission Power IEs* are included), the Node B shall use any transmission power level currently used on already existing CCTrCH's for this **Node B Communication ContextUE**. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]

If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL pPower IE*, the Node B shall store this value and not transmit with a higher power on any DL DPCH of the RL. If no *Maximum DL pPower IE* is included, any Maximum DL power stored for already existing RLs for this **Node B Communication ContextUE** shall be applied. [FDD - During compressed mode, the $P_{SR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]

If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL pPower IE*, the Node B shall store this value and never transmit with a lower power on any DL DPCH of the RL. If no *Minimum DL pPower IE* is included, any Minimum DL power stored for already existing RLs for this **Node B Communication ContextUE** shall be applied.

[TDD – If the RADIO LINK ADDITION REQUEST message includes the *DL Time Slot ISCP Info IE*, the Node B shall use the indicated value when deciding the DL TX Power for each timeslot as specified in ref. [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference

is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged].

[FDD – If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Individual" in the existing RL(s) and the RADIO LINK ADDITION REQUEST message includes the *DL Reference Power IE*, the Node B shall activate the power balancing and use the *DL Reference Power IE* for the power balancing procedure in the new RL(s), if activation of power balancing by the RADIO LINK ADDITION REQUEST message is supported, according to subclause 8.3.7.]

[FDD – If activation of power balancing by the RADIO LINK ADDITION REQUEST message is supported by the Node B, the Node B shall include the *DL Power Balancing Activation Indicator IE* in the *RL Information Response IE* in the RADIO LINK ADDITION RESPONSE message.]

General:

If the RADIO LINK ADDITION REQUEST message includes the *RL Specific DCH Information IE*, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the DCH or the set of co-ordinated DCHs.

[FDD – If the RADIO LINK ADDITION REQUEST message contains an *SSDT Cell Identity IE*, the Node B shall activate SSDT, if supported, for the concerned new RL, with the indicated SSDT cell identity used for that RL.]

The Node B shall start reception on the new RL(s) after the RLs are successfully established.

[FDD – Radio Link Set Handling]:

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID IE* included in the RADIO LINK ADDITION RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication eContext.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another new or existing RL, the Node B shall assign the *RL Set ID IE* included in the RADIO LINK ADDITION RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication eContext.]

[FDD – After addition of the new RL(s), the UL out-of-sync algorithm defined in [10] shall, for each of the previously existing and newly established RL Set(s), use the maximum value of the parameters *N_OUTSYNC_IND* and *T_RLFAILURE* and the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells supporting the radio links of the RL Set. **The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells supporting the radio links of the RL Set.**]

Response Message:

If all requested RLs are successfully added, the Node B shall respond with a RADIO LINK ADDITION RESPONSE message.

After sending of the RADIO LINK ADDITION RESPONSE message, the Node B shall continuously attempt to obtain UL synchronisation on the Uu interface **and start reception on the new RL.**

For each RL for which the *Delayed Activation IE* is not included in the RADIO LINK ADDITION REQUEST message, the Node B shall:

- [FDD - start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16].]
- [TDD - start transmission on the new RL immediately as specified in [16].]

For each RL for which the *Delayed Activation IE* is included in the RADIO LINK ADDITION REQUEST message, the Node B shall:

- if the *Delayed Activation IE* indicates "Separate Indication":
 - not start any DL transmission for the concerned RL on the Uu interface;
- if the *Delayed Activation IE* indicates "CFN":

- [FDD – start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16], however never before the CFN indicated in the *Activation CFN IE*.]
- [TDD – start transmission on the new RL at the CFN indicated in the *Activation CFN IE* as specified in [16].]

8.3.1.3 Unsuccessful Operation

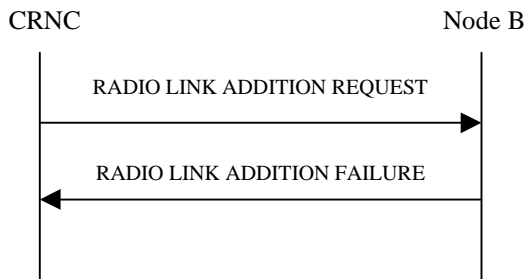


Figure 29: Radio Link Addition procedure: Unsuccessful Operation

If the establishment of at least one radio link is unsuccessful, the Node B shall respond with a RADIO LINK ADDITION FAILURE message. The message contains the failure cause in the *Cause IE*.

[FDD - If some RL(s) were established successfully, the Node B shall indicate this in the RADIO LINK ADDITION FAILURE message in the same way as in the RADIO LINK ADDITION RESPONSE message.]

[FDD – If the RADIO LINK ADDITION REQUEST contains a *C-ID IE* indicating that a Radio Link must be established on a Cell where DPC Mode change is not supported and DPC Mode can be changed for the relevant Node B Communication Context, the Node B shall consider the procedure as failed for the concerned Radio Link and shall respond with a RADIO LINK ADDITION FAILURE with the appropriate cause value (“DPC Mode change not supported”).]

Typical cause values are as follows:

Radio Network Layer Cause

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- UL SF not supported
- DL SF not supported
- Reconfiguration CFN not elapsed
- CM not supported
- [FDD – DPC Mode change not supported]
- Delayed Activation not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.1.4 Abnormal conditions

[FDD – If the RADIO LINK ADDITION REQUEST [message](#) contains the *Compressed Mode Deactivation Flag IE* with the value "Deactivate" when compressed mode is active for the existing RL(s), and at least one of the new RL is added in a cell that has the same UARFCN (both UL and DL) of at least one cell with an already existing RL, the Node B shall regard the Radio Link Addition procedure as failed and shall respond with a RADIO LINK ADDITION FAILURE message with the cause value "Invalid CM settings".]

[FDD – If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Individual" in the existing RL(s) and if the *DL Reference Power IEs* are included in the *RL Information IE* but the *DL Reference Power IE* is not present for each RL in the *RL Information IE*, the Node B shall regard the Radio Link Addition procedure as failed and shall respond with a RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *DL Reference Power IEs* in the *RL Information IE* but the power balancing is not active in the existing RL(s) or the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s), the Node B shall regard the Radio Link Addition procedure as failed and shall respond with a RADIO LINK ADDITION FAILURE message with the cause value "Power Balancing status not compatible".]

If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address IE* and the *Binding ID IE* in the *RL Specific DCH Information IE* included in the *RL Information IE* for a specific RL and the *Diversity Control Field IE* is set to "Must", the Node B shall regard the Radio Link Addition procedure as failed and respond with the RADIO LINK ADDITION FAILURE message.

If the RADIO LINK ADDITION REQUEST message contains the *Transport Layer Address IE* or the *Binding ID IE*, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

8.3.2 Synchronised Radio Link Reconfiguration Preparation

8.3.2.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one [UE-UTRAN connection within a Node B Communication Context](#).

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.2.2 Successful Operation

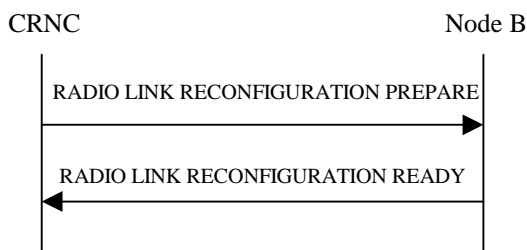


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the CRNC by sending the [message](#) RADIO LINK RECONFIGURATION PREPARE [message](#) to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Modify* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the UL of a DCH, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the DL of a DCH, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes multiple *DCH Specific Info* IEs, then the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs to Modify* IE includes the *UL FP Mode* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Add* IE includes multiple *DCH sSpecific Info* IEs then, the Node B shall treat the DCHs in the *DCHs to Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector IE QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD – If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have the *QE-Selector IE* set to "non-selected", the Physical channel BER shall be used for the QE, ref. [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the *radio-Uu* interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Delete* IEs, the Node B shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of co-ordinated DCHs in the new configuration.

Physical Channel Modification:

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *UL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPCHs* IE (if it is included) in the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]
- [FDD – If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD – The Node B shall use the *TFCS* IE for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL DPCCH Slot Format* IE, the Node B shall set the new Uplink DPCCH Structure to the new configuration.]
- [FDD - If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the Node B shall apply diversity according to the given value.]
- [FDD – If the *UL DPCH Information* IE includes an *SSDT Cell Identity Length* IE and/or an *S-Field Length* IE, the Node B shall apply the values in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – The Node B shall use the *TFCS* IE for the DL (if it is present) when reserving resources for the downlink of the new configuration. The Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE or the *TFCI Presence* IE, the Node B shall use the information when building TFCIs in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *DL DPCCH Slot Format* IE, group the Node B shall set the new Downlink DPCCH Structure to the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the Node B shall apply the indicated multiplexing type in the new configuration.]

- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to "Not Used", the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH eCode mMapping* IE, then the Node B shall apply the defined mapping between TFCI values and PDSCH channelisation codes.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH RL ID* IE, then the Node B shall infer that the PDSCH for the specified user will be transmitted on the defined radio link.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Modify* or *DL CCTrCH to Modify* IEs, then the Node B shall treat them each as follows:]

- [TDD – If the IE includes any of the *TFCS* IE, *TFCI coding* IE or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]
- [TDD – If the IE includes any *UL DPCH #To #Add* IE or *DL DPCH #To #Add* IEs, the Node B shall include this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH #To #Delete* IE or *DL DPCH #To #Delete* IEs, the Node B shall remove this DPCH in the new configuration.]
- [TDD – If the IE includes any ~~UL~~ *UL DPCH #To #Modify* IE or *DL DPCH #To #Modify* IEs, and includes any of the *Repetition Period* IE, *Repetition Length* IE, or *TDD DPCH Offset* IE, or the message includes UL/DL Timeslot Information and includes any of the ~~[3.84Mcps TDD - {3.84Mcps TDD – Midamble sShift #And Burst Type~~ IE, *Time Slot* IE], [1.28Mcps TDD - *Midamble sShift LCR* IE, *Time Slot LCR* IE], or *TFCI #Presence* IE or the message includes UL/DL Code information and includes [3.84Mcps TDD - *TDD Channelisation Code* IE], [1.28Mcps TDD - *TDD Channelisation Code LCR* IE], the Node B shall apply these specified information elements as the new values, otherwise the old values specified for this DPCH configuration are still applicable.]
- [1.28Mcps TDD – If the *UL CCTrCH #To Modify* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control according [19] and [21] when the new configuration is being used.]

[TDD – UL/DL CCTrCH Addition]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH #To Add* IE or *DL CCTrCH #To Add* IE, the Node B shall include this CCTrCH in the new configuration.]

[TDD – If the *UL/DL CCTrCH #To Add* IE includes any *UL/DL DPCH Information* IE, the Node B shall reserve necessary resources for the new configuration of the UL/DL DPCH(s) according to the parameters given in the message.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL CCTrCH #To Add* IE, the Node B shall set the TPC step size of that CCTrCH to the same value as the lowest numbered DL CCTrCH in the current configuration.]

[1.28Mcps TDD – The Node B shall use the *UL SIR Target* IE in the *UL CCTrCH #To Add* IE as the UL SIR value for the inner loop power control for this CCTrCH according [19] and [21] in the new configuration.]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any UL or DL CCTrCH to be deleted, the Node B shall remove this CCTrCH in the new configuration.]

DL Power Control:

- [FDD - If the *RL Information* IE includes the *DL Reference Power* IEs and the power balancing is active, the Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported, at the CFN in the RADIO LINK RECONFIGURATION COMMIT message, according to subclause 8.3.7, using the *DL Reference Power* IE. If the CFN modulo the value of the *Adjustment Period* IE is not equal to 0, the power balancing continues with the old reference power until the end of the current adjustment period, and the updated reference power shall be used from the next adjustment period.

[FDD - If updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH #To Addmodify*, *DSCH #To Modifyadd* or *DSCH #To #Delete* IEs, then the Node B shall use this information to add/modify/delete the indicated DSCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.

The Node B shall include in the RADIO LINK-RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DSCH.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Information* IE, then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received if one does not already exist or shall apply the new values if such a bearer does already exist. The *Binding ID* IE and *Transport Layer Address* IE of any new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message. If the RADIO LINK RECONFIGURATION PREPARE message specifies that the TFCI2 transport bearer is to be deleted, then the Node B shall release the resources associated with that bearer in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Request Indicator* IE in the *TFCI2 Bearer Information* IE with the value "New Bearer Requested", the Node B shall, if supported, establish a new transport bearer replacing the existing transport bearer on which the DSCH TFCI Signaling control frames shall be received. The *Binding ID* IE and *Transport Layer Address* IE of a new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message.]

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI field but a TFCI2 transport bearer has not already been set up and *TFCI2 Bearer Information* IE is not included in the message, then the Node B shall transmit the TFCI2 field with zero power in the new configuration.]

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information* IE is included in the message, then the Node B shall transmit the TFCI2 field with zero power until Synchronisation is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer in the new configuration (see ref. [24]).]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Length #Of TFCI2* IE, then the Node B shall apply the length of TFCI (field 2) indicated in the message in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Length #Of TFCI2* IE and the *Split #Type* IE is present with the value "Hard", then the Node B shall assume the length of the TFCI (field 2) is 5 bits in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *DSCH Common Information-#E IE*, the Node B shall treat it as follows:]

- [FDD - If the *Enhanced DSCH PC Indicator* IE is included and set to "Enhanced DSCH PC Active in the UE ", the Node B shall activate enhanced DSCH power control in accordance with ref. [10] subclause 5.2.2, if supported, using either:]
 - [FDD - the *SSDT Cell Identity for EDSCHPC* IE in the *RL Information* IE, if the *SSDT Cell Identity* IE is not included in the *RL Information* IE or]
 - [FDD - the *SSDT Cell Identity* IE in the *RL Information* IE, if both the *SSDT Cell Identity* IE and the *SSDT Cell Identity for EDSCHPC* IE are included in the *RL Information* IE.]

[FDD - together with the *SSDT Cell Identity Length* IE in *UL DPCH Information* IE, and *Enhanced DSCH PC* IE, in the new configuration.]

[FDD - If the enhanced DSCH power control is activated and the TFCI power control in DSCH hard split mode is supported, the primary/secondary status determination in the enhanced DSCH power control is also applied to the TFCI power control in DSCH hard split mode.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Enhanced DSCH PC Indicator* IE set to "Enhanced DSCH PC not Active in the UE", the Node B shall deactivate enhanced DSCH power control in the new configuration.]

[TDD – USCH Addition/Modification/Deletion:]

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]
- [TDD – The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each USCH.]

RL Information:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B may activate SSDT using the *SSDT Cell Identity* IE in the new configuration.]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the Node B shall deactivate SSDT in the new configuration.]
- [FDD – If the *RL Information* IE includes a *DL Code Information* IE, the Node B shall apply the values in the new configuration.]
- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- If the *RL Information* IE includes the *Maximum DL Power* and/or the *Minimum DL Power* IEs, the Node B shall apply the values in the new configuration. [FDD - During compressed mode, the $P_{SR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k .]
- [TDD – If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial CCTrCH DL power for each CCTrCH by the following rule: If the *CCTrCH Initial DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall apply the determined initial CCTrCH DL power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included with a new CCTrCH (even if *CCTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing CCTrCHs when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]
- [FDD- If the *RL Information* IE includes the *DL DPCH Timing Adjustment* IE, the Node B shall adjust the timing of the radio link accordingly in the new configuration.]

Signalling bearer rearrangement:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Signalling Bearer Request Indicator* IE the Node B shall, if supported, allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION READY message.

HS-DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH Information* ~~to Add~~ IE or ~~HS-DSCH Information to delete~~ IEs or *HS-DSCH Information* ~~to Modify~~ IE or *HS-DSCH To Delete* IE, then the Node B shall use this information to add/modify/delete the indicated HS-DSCH channel to/from the radio link.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-PDSCH RL ID* IE, then the Node B shall configure the HS-PDSCH in the radio link indicated by this IE, while removing any existing HS-PDSCH resources from other radio links associated with the Node B Communication Context.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH-RNTI* IE, then the Node B shall use the HS-DSCH-RNTI for the Node B Communication Context.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH Information* ~~to Delete~~ IE requesting the deletion of certain HS-DSCH resources for the Node B Communication Context, the Node B shall remove the indicated HS-DSCH in the new configuration.

General

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address* IE and *Binding ID* IEs in the *DSCHs* ~~to Modify~~, *DSCHs* ~~to Add~~, [TDD - *USCHs* ~~to Modify~~, *USCHs* ~~to Add~~] or in the *RL Specific DCH Information* IEs, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exists a Prepared Reconfiguration, as defined in subclause 3.1.

In the RADIO LINK RECONFIGURATION READY message, the Node B shall include the *RL Information Response* IE for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address IE and the Binding ID IE in the DCH Information Response IE* ~~Transport Layer Address and the Binding ID~~ for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In case of a DCH requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* IE shall be included in the *DCH Information Response* IE.

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iub interface, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the DCH in the set of co-ordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the Node B, the *RL Information Response* ~~RL Information Response~~ IE shall be included only for one of the combined RLs. The *Transport Layer Address* IE and the ~~Binding ID~~ IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

8.3.2.3 Unsuccessful Operation

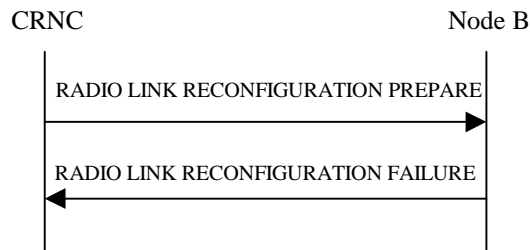


Figure 31: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

If the Node B cannot reserve the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be added, it shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed.

If the requested Synchronised Radio Link Reconfiguration Preparation procedure fails for one or more RLS, the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

Radio Network Layer Cause

- UL SF not supported
- DL SF not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- Number of DL codes not supported
- Number of UL codes not supported
- RL Timing Adjustment not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.2.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE" and SSDT is not active in the current configuration, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation

procedure as failed if the *UL DPCCH Information* IE does not include the *SSDT Cell Identity Length* IE. In this case, it shall respond with a RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message includes a *DCHs \neq To Modify* IE or *DCHs \neq To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs \neq To Modify* IE or *DCHs \neq To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-Static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK **SETUP RECONFIGURATION FAILURE** message.

[FDD - If the *RL Information* IE includes the *DL Reference Power* IEs, but the power balancing is not active in the indicated RL(s), the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the Node B shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s) but the *RL Information* IE includes more than one *DL Reference Power* IEs, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the Node B shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Length \neq Of TFCI2* IE but the *TFCI \neq Signalling \neq Option* IE is set to "Normal", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Length \neq Of TFCI2* IE but the *Split \neq Type* IE is set to "Logical", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Split Type* IE set to the value "Hard" and the *Length \neq Of TFCI2* IE set to the value "5", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

8.3.3 Synchronised Radio Link Reconfiguration Commit

8.3.3.1 General

This procedure is used to order the Node B to switch to the new configuration for the Radio Link(s) within the Node B, previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure.

The message shall use the Communication Control Port assigned for this Node B Communication Context.

8.3.3.2 Successful Operation

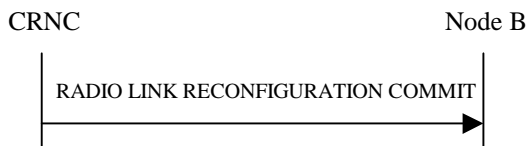


Figure 32: Synchronised Radio Link Reconfiguration Commit procedure, Successful Operation

The Node B shall switch to the new configuration previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure at the next coming CFN with a value equal to the value requested by the CRNC in the *CFN* IE when receiving the RADIO LINK RECONFIGURATION COMMIT message from the CRNC.

[FDD – If the *Active Pattern Sequence Information* IE is included in the RADIO LINK RECONFIGURATION COMMIT message, the *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE shall be ignored by the Node B.]

When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

In the case of a transport channel modification for which a new transport bearer was requested and established, the switch to the new transport bearer shall also take place at the indicated CFN. The detailed frame protocol handling during transport bearer replacement is described in [16], [section-subclause 5.10.1](#) and in [24], subclause 5.8.2.

In [the](#) case of [a](#) signalling bearer re-arrangement, the new Communication Control Port shall be used once the Node B has received the RADIO LINK RECONFIGURATION COMMIT message via the old Communication Control Port.

[FDD – If the RADIO LINK RECONFIGURATION COMMIT includes the *Active Pattern Sequence Information* IE, the Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the *CFN* IE. From that moment on, all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions shall be started when the indicated *TGCFN* IE elapses. The *CFN* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value. If the values of the *CFN* IE and the *TGCFN* IE are equal, the concerned [ing](#) Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CFN* IE.]

8.3.3.3 Abnormal Conditions

If a new transport bearer is required for the new reconfiguration and it is not available at the requested CFN, the Node B shall initiate the Radio Link Failure procedure.

8.3.4 Synchronised Radio Link Reconfiguration Cancellation

8.3.4.1 General

This procedure is used to order the Node B to release the new configuration for the Radio Link(s) within the Node B, previously prepared by the Synchronised Radio Link Preparation Reconfiguration procedure.

The message shall use the Communication Control Port assigned for this Node B Communication Context.

8.3.4.2 Successful Operation



Figure 33: Synchronised Radio Link Reconfiguration Cancellation procedure, Successful Operation

When receiving the RADIO LINK RECONFIGURATION CANCEL message from the CRNC, the Node B shall release the new configuration ([FDD - including the new Transmission Gap Pattern Sequence parameters (if existing)]) previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure and continue using the old configuration. When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

8.3.4.3 Abnormal Conditions

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8.3.5 Unsynchronised Radio Link Reconfiguration

8.3.5.1 General

The Unsynchronised Radio Link Reconfiguration procedure is used to reconfigure Radio Link(s) related to one UE-UTRAN connection within a Node B.

The Unsynchronised Radio Link Reconfiguration procedure is used when there is no need to synchronise the time of the switching from the old to the new configuration in one Node B used for a UE-UTRAN connection with any other Node B also used for the UE-UTRAN connection.

The Unsynchronised Radio Link Reconfiguration procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.5.2 Successful Operation

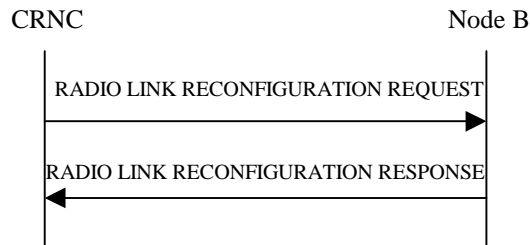


Figure 34: Unsynchronised Radio Link Reconfiguration Procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the CRNC by sending the **message-RADIO LINK RECONFIGURATION REQUEST** message to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs #To Modify* IEs then the Node B shall treat them each as follows:

- If the *DCHs #To Modify* IE includes ~~on~~ the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the **radio-Uu** interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs #To Modify* IE includes the *Transport Format Set* IE for the UL, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs #To Modify* IE includes the *Transport Format Set* IE for the DL, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs #To Modify* IE includes multiple *DCH Specific Info* IEs, then the Node B shall treat the DCHs in the *DCHs #To Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs #To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs #To Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs #To Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]

- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCH #To Add* IEs, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCHs in the new configuration. In particular:

- If a *DCHs #To Add* IE includes multiple *DCH Specific Info* IEs for a DCH to be added, the Node B shall treat the DCHs in the *DCHs #To Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD - For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Node B shall use the Transport channel BER from that DCH as the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If the *QE-Selector IE QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Node B shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" as the QE in the UL data frames [16]. [FDD – If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If all DCHs have the *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the *radio-Uu* interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be **added/modified**, the Node B shall apply the new CCTrCH ID in the downlink of this DCH in the new configuration.]
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be **added/modified**, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the Node B shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of co-ordinated DCHs in the new configuration.

[FDD - Physical Channel Modification:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *UL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *UL DPCH Information* IE includes the *TFCS* IE for the UL, the Node B shall apply the new TFCS in the Uplink of the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes a *DL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *DL DPCH Information* IE includes on the *TFCS* IE for the DL, the Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE, the Node B shall use the **use the** information when building TFCIs in the new configuration.
- [FDD – If the *Length of TFCI2* IE is included, then the Node B shall apply the length of TFCI (field 2) indicated in the message in the new configuration.]
- [FDD – If the *Length of TFCI2* IE is not included and the *Split Type* IE is present with the value "Hard", then the Node B shall assume the value of the TFCI (field 2) is 5 bits in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE **and the IE is set to "Used"**, the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE **message** includes the *Limited Power Increase* IE **and the IE is set to "Not Used"**, the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH to mModify* IE or *DL CCTrCH to mModify* IE in the Radio Link(s), the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message.]

[TDD – If the *UL/DL CCTrCH to mModify* IE includes *TFCS* IE, and/or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH to dDelete* IE or *DL CCTrCH to dDelete* IE, the Node B shall not include this CCTrCH in the new configuration.]

DL Power Control:

- [FDD – If the *Radio Link Information* IE includes the *DL Reference Power* IE and the power balancing is active, the Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported, using the *DL Reference Power* IE in the RADIO LINK RECONFIGURATION REQUEST message. The updated reference power shall be used from the next adjustment period.]

[FDD – If updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

RL Information:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Information* IE, the Node B shall treat it as follows:

- If the *RL Information* IE includes the *Maximum DL Power* IE, the Node B shall apply this value to the new configuration and not transmit with a higher power on any Downlink DPCH of the Radio Link once the new configuration is being used. [FDD - During compressed mode, the $P_{STR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]

- If the *RL Information IE* includes the *Minimum DL Power IE*, the Node B shall apply this value to the new configuration and never transmit with a lower power on any Downlink Channelisation Code of the Radio Link once the new configuration is being used.
- [FDD – If the *RL Information IE* contains the *Transmission Gap Pattern Sequence Code Information IE* in the *DL Code Information IE* for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]

Signalling Bearer Re-arrangement:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Signalling Bearer Request Indicator IE*, the Node B shall, if supported, allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID IE* in the RADIO LINK RECONFIGURATION RESPONSE message.

General

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Specific DCH Information IE*, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator IE*.

If the requested modifications are allowed by the Node B, the Node B has successfully allocated the required resources, and changed to the new configuration, it shall respond to the CRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

In the RADIO LINK RECONFIGURATION RESPONSE message, the Node B shall include the *RL Information Response IE* for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator IE*. The detailed frame protocol handling during transport bearer replacement is described in [16], [section subclause 5.10.1](#).

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iub interface, the *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* shall be included only for one of the DCH in the set of coordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the Node B, the *RL Information Response IE* shall be included only for one of the combined Radio Links. The *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* shall be included only for one of the combined Radio Links.

In the case of a signalling bearer re-arrangement, the new Communication Control Port shall be used once the Node B has sent the RADIO LINK RECONFIGURATION RESPONSE message via the old Communication Control Port.

8.3.5.3 Unsuccessful Operation

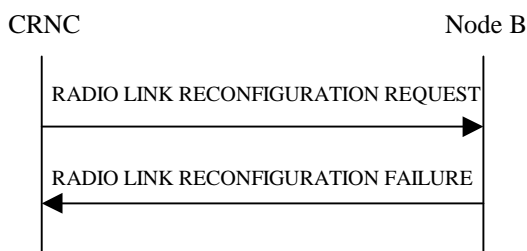


Figure 35: Unsynchronised Radio Link Reconfiguration procedure, Unsuccessful Operation

If the Node B cannot allocate the necessary resources for all the new DCHs of one set of co-ordinated, DCHs requested to be set-up, it shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed.

If the requested Unsynchronised Radio Link Reconfiguration procedure fails for one or more Radio Link(s), the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

Radio Network Layer Cause

- CM not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.5.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

[FDD – If the *RL Information* IE contains the *DL Code Information* IE and this IE includes *DL Scrambling Code* and *FDD DL Channelisation Code Number* IEs not matching the DL Channelisation code(s) already allocated to the Radio Link identified by *RL ID* IE, then the Node B shall consider the Unsynchronised Radio Link Reconfiguration procedure as having failed and it shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Unsynchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes a *DCHs \dagger To Modify* IE or *DCHs \dagger To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs \dagger To Modify* IE or *DCHs \dagger To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-Static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *DL Reference Power* IEs, but the power balancing is not active in the indicated RL(s), the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and the Node B shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s) but the *RL Information* IE includes more than one *DL Reference Power* IEs, the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and the Node B shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

If the RADIO LINK RECONFIGURATION REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

8.3.6 Radio Link Deletion

8.3.6.1 General

The Radio Link Deletion procedure is used to release the resources in a Node B for one or more established radio links towards a UE.

The Radio Link Deletion procedure may be initiated by the CRNC at any time when the Node B Communication Context exists.

8.3.6.2 Successful Operation

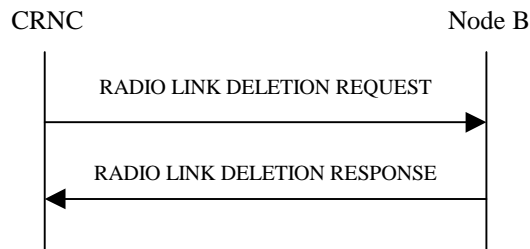


Figure 36: Radio Link Deletion procedure, Successful Operation

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the CRNC to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon receipt of this message, the Node B shall delete the radio link(s) identified by the *RL ID IE*, *Node B Communication ID IE* ~~and~~ and *CRNC Communication ID IE* and release all associated resources and respond to the CRNC with a RADIO LINK DELETION RESPONSE message.

[FDD – After deletion of the RL(s), the UL out-of-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the maximum value of the parameters *N_OUTSYNC_IND* and *T_RLFAILURE*, and the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells supporting the radio links of the RL Set and the UL in-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the minimum value of the parameters *N_INSYNC_IND* that are configured in the cells supporting the radio links of the RL Set].

8.3.6.3 Unsuccessful Operation

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8.3.6.4 Abnormal Conditions

If the RL indicated by the *RL ID IE*, *Node B Communication ID IE* and *CRNC Communication ID IE* does not exist, the Node B shall respond with the RADIO LINK DELETION RESPONSE message and use the *CRNC Communication Context ID IE* received in the RADIO LINK DELETION REQUEST message.

8.3.7 Downlink Power Control [FDD]

8.3.7.1 General

The purpose of this procedure is to balance the DL transmission powers of one or more Radio Links used for the related UE-UTRAN connection within the Node B. The Downlink Power Control procedure may be initiated by the CRNC at any time when the Node B eCommunication eContext exists, irrespective of other ongoing CRNC initiated dedicated NBAP procedures towards this Node B eCommunication eContext. The only exception occurs when the CRNC has requested the deletion of the last RL via this Node B, in which case the Downlink Power Control procedure shall no longer be initiated.

8.3.7.2 Successful Operation



Figure 37: Downlink Power Control procedure, Successful Operation

The procedure is initiated by the CRNC sending a DL POWER CONTROL REQUEST message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

The *Power Adjustment Type* IE defines the characteristic of the power adjustment.

If the value of the *Power Adjustment Type* IE is ~~Common~~ "Common", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "Common". As long as the Power Balancing Adjustment Type of the Node B Communication Context is set to "Common", the Node B shall perform the power adjustment (see below) for all existing and future radio links associated with the context identified by the *Node B Communication Context ID* IE and use a common DL reference power level.

If the value of the *Power Adjustment Type* IE is ~~Individual~~ "Individual", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "Individual". The Node B shall perform the power adjustment (see below) for all radio links addressed in the message using the given DL Reference Powers per RL. If the Power Balancing Adjustment Type of the Node B Communication Context was set to "Common" before this message was received, power balancing on all radio links not addressed by the DL POWER CONTROL REQUEST message shall remain to be executed in accordance with the existing power balancing parameters which are now considered RL individual parameters. Power balancing will not be started on future radio links without a specific request.

If the value of the *Power Adjustment Type* IE is ~~None~~ "None", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "None" and the Node B shall suspend on going power adjustments for all radio links for the ~~Node B Communication UE~~ Context.

If the *Inner Loop DL PC Status* IE is present and set to "Active", the Node B shall activate inner loop DL power control for all radio links for the Node B eCommunication eContext. If the *Inner Loop DL PC Status* IE is present and set to "Inactive", the Node B shall deactivate inner loop DL power control for all radio links for the Node B eCommunication eContext according to ref. [10].

Power Adjustment

The power balancing adjustment shall be superimposed on the inner loop power control adjustment (see Ref. [10]) if activated. The power balancing adjustment shall be such that:

$$\sum P_{bal} = (1 - r)(P_{ref} + P_{P-CPICH} - P_{init}) \text{ with an accuracy of } \pm 0.5 \text{ dB}$$

where the sum is performed over an adjustment period corresponding to a number of frames equal to the value of the *Adjustment Period* IE, P_{ref} is the value of the *DL Reference Power* IE, $P_{P-CPICH}$ is the power used on the primary CPICH, P_{init} is the code power of the last slot of the previous adjustment period and r is given by the *Adjustment Ratio* IE. If the last slot of the previous adjustment period is within a transmission gap due to compressed mode, P_{init} shall be set to the same value as the code power of the slot just before the transmission gap.

The adjustment within one adjustment period shall in any case be performed with the constraints given by the *Max Adjustment Step* IE and the DL TX power range set by the CRNC.

The power adjustments shall be started at the first slot of a frame with CFN modulo the value of *Adjustment Period* IE equal to 0 and shall be repeated for every adjustment period and shall be restarted at the first slot of a frame with CFN=0, until a new DL POWER CONTROL REQUEST message is received or the RL is deleted.

8.3.7.3 Abnormal Conditions

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8.3.8 Dedicated Measurement Initiation

8.3.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on dedicated resources in a Node B.

The Dedicated Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.8.2 Successful Operation

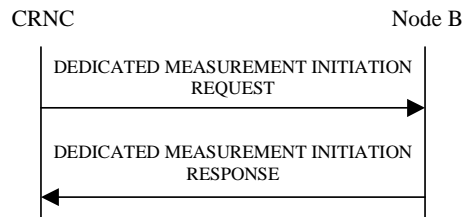


Figure 38: Dedicated Measurement Initiation procedure, Successful Operation

The procedure is initiated with a DEDICATED MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the eCCommunication eCControl pPort assigned to the Node B eCCommunication eContext.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below the meaning of the parameters are given in other specifications.

If the *Node B Communication Context ID IE* equals the reserved value "All NBCC", this measurement request shall apply for all current and future Node B Communication Contexts controlled via the Communication Control Port on which the DEDICATED MEASUREMENT INITIATION REQUEST message was received. Otherwise, this measurement request shall apply for the requested Node B Communication Context ID only.

If the *Node B Communication Context ID IE* equals the reserved value "All NBCC", the measurement request shall be treated as a single measurement, despite applying to multiple contexts. This means that it may only be terminated or failed on "All NBCC".

If the *Node B Communication Context ID IE* equals the reserved value "All NBCC", the measurement shall be initiated only for those Node B Communication Contexts handling a mode (FDD, 3.84Mcps TDD or 1.28Mcps TDD) for which the concerned measurement is specified in [4] and [5].

If the *Dedicated Measurement Object Type IE* is set to *Dedicated Measurement Object Type* is indicated as being "RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all indicated Radio Links.

[FDD – If the *Dedicated Measurement Object Type IE* is set to *Dedicated Measurement Object Type* is indicated as being "RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all indicated Radio Link Sets.]

[FDD - If the *Dedicated Measurement Object Type IE* is set to *Dedicated Measurement Object Type* is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all current and future Radio Links within the Node B Communication Context.]

[TDD - If the *Dedicated Measurement Object Type IE* is set to *Dedicated Measurement Object Type* is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for one existing DPCH per CCTrCH in each used time slot of current and future Radio Links within the Node B Communication Context, provided the measurement type is applicable to the respective DPCH.]

[FDD – If the *Dedicated Measurement Object Type IE* is set to *Dedicated Measurement Object Type* is indicated as being "ALL RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all existing and future Radio Link Sets within the Node B Communication Context.]

[TDD – If the *DPCH ID* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually. If no *DPCH ID* IE and no *PUSCH Information* IE is provided within the RL Information, the measurement request shall apply for one existing physical channel per CCTrCH in each used time slot of the Radio Link, provided the measurement type is applicable to this physical channel.]

[TDD – If the *PUSCH Information* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually.]

If the *CFN Reporting Indicator* IE is set to "FN Reporting Required", the *CFN* IE shall be included in the **DEDICATED MEASUREMENT REPORT message measurement report** or in the **DEDICATED MEASUREMENT RESPONSE message measurement response**, the latter only in the case the *Report Characteristics* IE is set to "'On-Demand'". The reported CFN shall be the CFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *CFN* IE is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

Report characteristics

The *Report Characteristics* IE is set to indicate how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to "'On-Demand'", the Node B shall return the result of the measurement immediately.

If the *Report Characteristics* IE is set to "'Periodic'", the Node B shall periodically initiate the Dedicated Measurement Report procedure for this measurement, with the requested report frequency.

If the *Report Characteristics* IE is set to "'Event A'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If **the Measurement Hysteresis Time IE is not included no hysteresis time is given**, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "'Event B'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If **the Measurement Hysteresis Time IE is not included no hysteresis time is given**, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "'Event C'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising/falling time **specified by the Measurement Change Time IE** has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to "'Event D'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the rising/falling time **specified by the Measurement Change Time IE** has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to "'Event E'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If **the Measurement Threshold 2 IE 'Measurement Threshold 2'** is not present, the Node B shall use **the value of the Measurement Threshold 1 IE 'Measurement Threshold 1'** instead. If **the Measurement Hysteresis Time IE is not included no 'Measurement Hysteresis Time' is provided**, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to "'Event F'", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as

terminating any corresponding periodic reporting. If ~~the Measurement Threshold 2 IE, Measurement Threshold 2~~ is not present, the Node B shall use ~~the value of the Measurement Threshold 1 IE, Measurement Threshold 1~~ instead. If ~~the Measurement Hysteresis Time IE is not included, no Measurement Hysteresis Time is provided~~, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is not set to "On-Demand", the Node B is required to perform reporting for a dedicated measurement object, in accordance with the conditions provided in the DEDICATED MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no dedicated measurement object(s) for which a measurement is defined exists any-more, the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Dedicated Measurement Reporting procedure immediately, and then continue with the measurements as specified in the DEDICATED MEASUREMENT INITIATION REQUEST message.

Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the DEDICATED MEASUREMENT INITIATION RESPONSE, DEDICATED MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n)

$a = 1/2^{(k/2)}$, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

Response message

If the Node B was able to initiate the measurement requested by the CRNC, it shall respond with the DEDICATED MEASUREMENT INITIATION RESPONSE message using the eCommunication eControl pPort assigned to the Node B eCommunication eContext. The message shall include the same Measurement ID that was used in the measurement request.

Only in the case where the *Report Characteristics* IE is set to "On-Demand", the DEDICATED MEASUREMENT INITIATION RESPONSE message shall contain the measurement result. In this case, also the *Dedicated Measurement Object* IE shall be included if it was included in the request message.

In the case that where the *Node B Communication Context ID* IE is set to "All NBCC", the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE shall be set to the value "All CRNCCC", which is reserved for this purpose.

Interaction with Reset Procedure

If a measurement has been requested with the *Node B Communication Context ID* IE set to "All NBCC", the Node B shall terminate the measurement locally if either the CRNC or the Node B initiates the Reset procedure for the relevant Communication Control Port or the entire Node B.

8.3.8.3 Unsuccessful Operation

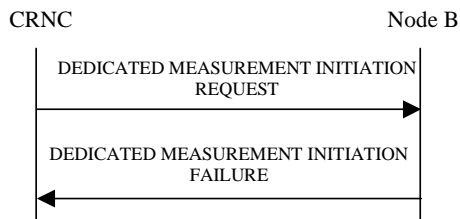


Figure 39: Dedicated Measurement Request-Initiation procedure: Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a DEDICATED MEASUREMENT INITIATION FAILURE message using the eCCommunication eCControl pPort assigned to the Node B eCCommunication eCContext. The message shall include the same Measurement ID that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message and the Cause IE set to an appropriate value.

In the case that where the Node B Communication Context ID IE is set to "All NBCC" the CRNC Communication Context ID IE in the DEDICATED MEASUREMENT INITIATION FAILURE shall be set to the value "All CRNCCC", which is reserved for this purpose.

Typical cause values are as follows:

Radio Network Layer cause

- Measurement not supported for the object
- Measurement Temporarily not Available

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.8.4 Abnormal Conditions

The allowed combinations of the Dedicated Measurement Type and Report Characteristics Type are shown in the table below marked with "X". For not allowed combinations, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

Table 4: Allowed Dedicated Measurement Type and Report Characteristics Type combinations

Dedicated Measurement Type	Report Characteristics Type								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
SIR	X	X	X	X	X	X	X	X	
SIR Error	X	X	X	X	X	X	X	X	
Transmitted Code Power	X	X	X	X	X	X	X	X	
RSCP	X	X	X	X	X	X	X	X	
Rx Timing Deviation	X	X	X	X	X	X	X	X	
Round Trip Time	X	X	X	X	X	X	X	X	

If the Dedicated Measurement Type received in the Dedicated Measurement Type IE is not defined in ref. [4] or [5] to be measured on the Dedicated Measurement Object Type received in the Dedicated Measurement Object Type IE in the

DEDICATED MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

8.3.9 Dedicated Measurement Reporting

8.3.9.1 General

This procedure is used by the Node B to report the result of measurements requested by the CRNC with the Dedicated Measurement Initiation procedure. The Node B may initiate the Dedicated Measurement Reporting procedure at any time after establishing a Radio Link, as long as the Node B eCommunication eContext exists.

8.3.9.2 Successful Operation

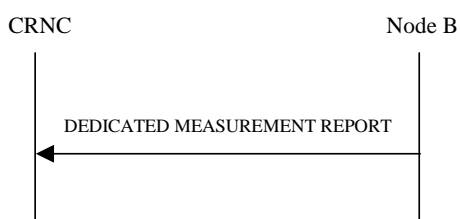


Figure 40: Dedicated Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the Node B shall initiate the Dedicated Measurement Reporting procedure. The DEDICATED MEASUREMENT REPORT message shall use the eCommunication eControl pPort assigned to the Node B eCommunication eContext. If the measurement was initiated (by the Dedicated Measurement Initiation procedure) for multiple dedicated measurement objects, the Node B may include measurement values for multiple objects in the DEDICATED MEASUREMENT REPORT message. Unless specified below, the meaning of the parameters are given in other specifications.

The **Dedicated Measurement ID** IE shall be set to the **Dedicated Measurement ID** provided by the CRNC when initiating the measurement with the Dedicated Measurement Initiation procedure.

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see ref.[22] and [23]), the Measurement not available shall be reported.

8.3.9.3 Abnormal Conditions

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8.3.10 Dedicated Measurement Termination

8.3.10.1 General

This procedure is used by the CRNC to terminate a measurement previously requested by the Dedicated Measurement Initiation procedure.

The Dedicated Measurement Termination procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.10.2 Successful Operation

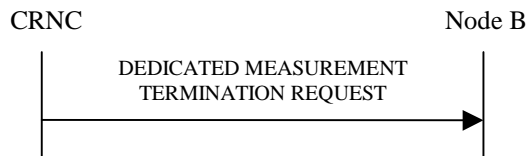


Figure 41: Dedicated Measurement Termination procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT TERMINATION REQUEST message, sent from the CRNC to the Node B using the eCommunication eControl pPort assigned to the Node B eCommunication eContext.

Upon reception, the Node B shall terminate reporting of dedicated measurements corresponding to the received Measurement ID IE ~~Dedicated Measurement ID~~.

8.3.10.3 Abnormal Conditions

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8.3.11 Dedicated Measurement Failure

8.3.11.1 General

This procedure is used by the Node B to notify the CRNC that a measurement previously requested by the Dedicated Measurement Initiation procedure can no longer be reported. The Node B is allowed to initiate the DEDICATED MEASUREMENT FAILURE INDICATION message at any time after having sent the RADIO LINK SETUP RESPONSE message, as long as the Node B eCommunication eContext exists.

8.3.11.2 Successful Operation



Figure 42: Dedicated Measurement Failure procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT FAILURE INDICATION message, sent from the Node B to the CRNC using the eCommunication eControl pPort assigned to the Node B eCommunication eContext, to inform the CRNC that a previously requested measurement can no longer be reported. The Node B has locally terminated the indicated measurement.

If the failed measurement was initiated with the *Node B Communication Context ID* IE set to the reserved value "All NBCC" and the Node B has terminated the measurement reporting of the measurement corresponding to the Measurement ID indicated in the DEDICATED MEASUREMENT FAILURE INDICATION message, the *CRNC Communication Context ID* IE shall be set to the value "All CRNCCC".

8.3.11.3 Abnormal Conditions

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8.3.12 Radio Link Failure

8.3.12.1 General

This procedure is used by the Node B to indicate a failure in one or more Radio Links [FDD - or Radio Link Sets][TDD or CCTrCHs within a Radio Link].

The Node B may initiate the Radio Link Failure procedure at any time after establishing a Radio Link.

8.3.12.2 Successful Operation



Figure 43: Radio Link Failure procedure, Successful Operation

When the Node B detects that one or more Radio Link [FDD - or Radio Link Sets] [TDD – or CCTrCHs within a Radio Link] is-are no longer available, it sends the RADIO LINK FAILURE INDICATION message to the CRNC indicating the failed Radio Links or Radio Link Sets or CCTrCHs with the most appropriate cause values in the *Cause IE*. The message shall use the Communication Control Port assigned to the concerned Node B Communication Context.

If the failure concerns one or more individual Radio Links, the Node B shall indicate the affected Radio Link(s) using the *RL Information IE*. [FDD - The Node B shall indicate the affected Radio Link Set(s) using the *RL Set Information IE*.] [TDD – If the failure concerns only the failure of one or more CCTrCH's within in-a radio link, the Node B shall indicate the affected CCTrCH's using the *CCTrCH ID IE*.]

When the Radio Link Failure procedure is used to notify the loss of UL synchronisation of a [FDD – Radio Link Set] [TDD – Radio Link or CCTrCHs within a Radio Link] on the Uu interface, the RADIO LINK FAILURE INDICATION message shall be sent, with the Cause IE set to cause value "Synchronisation Failure", when indicated by the UL out-of-sync algorithm defined in [10] and [21]. [FDD – The algorithm_s in [10] shall use the maximum value of the parameters N_OUTSYNC_IND and T_RLFAILURE, and the minimum value of the parameters N_INSYNC_IND, that are configured in the cells supporting the radio links of the RL Set.]

[FDD – When the Radio Link Failure procedure is used to indicate permanent failure in one or more Radio Links/Radio Link Sets due to the occurrence of an UL or DL frame with more than one transmission gap caused by one or more compressed mode pattern sequences, the DL transmission shall be stopped and the RADIO LINK FAILURE INDICATION message shall be sent with the cause value "Invalid CM Settings". After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the Node B shall not remove the Radio Link(s)/Radio Link Set(s) from the Node B Communication UE-Context, or the Node B Communication UE-Context itself.]

In the other cases, the Radio Link Failure procedure is used to indicate that one or more Radio Links/Radio Link Sets are permanently unavailable and cannot be restored. After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the Node B shall not remove the Radio Link/Radio Link Set from the Node B Communication UE-Context, or the Node B Communication UE-Context itself. When applicable, the retention priorities associated with the transport channels shall be used by the Node B to prioritise which Radio Links/Radio Link Sets to indicate as unavailable to the CRNC.

Typical cause values are:

Radio Network Layer Causes:

- Synchronisation Failure
- Invalid CM settings

Transport Layer Causes:

- Transport Resources Unavailable

Miscellaneous Causes:

- Control Processing Overload
- HW Failure
- O&M Intervention

8.3.12.3 Abnormal Conditions

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8.3.13 Radio Link Restoration**8.3.13.1 General**

This procedure is used by the Node B to notify the achievement and re-achievement of uplink synchronisation of one or more [FDD - Radio Link Sets][TDD – Radio Links or CCTrCHs within a Radio Link] on the Uu [interface](#).

The Node B may initiate the Radio Link Restoration procedure at any time after establishing a Radio Link.

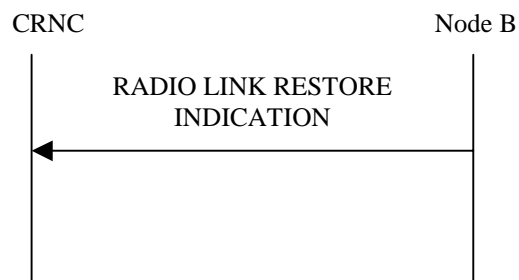
8.3.13.2 Successful Operation

Figure 44: Radio Link Restoration procedure, Successful Operation

The Node B shall send the RADIO LINK RESTORE INDICATION message to the CRNC when indicated by the UL [synchronisation](#) detection algorithm defined in ref. [10] and [21]. [FDD – The algorithm in ref. [10] shall use the minimum value of the parameters N_INSYNC_IND that are configured in the cells supporting the radio links of the RL Set.] **The message shall use the Communication Control Port assigned to the concerned Node B Communication Context.**

[TDD – If the re-established Uu synchronisation concerns one or more individual Radio Links, the Node B shall indicate the affected Radio Link(s) using the *RL Information IE*.] [TDD – If the re-established Uu synchronisation concerns one or more individual CCTrCHs within a radio link, the Node B shall indicate the affected CCTrCHs using the *CCTrCH ID IE*.] [FDD – If the re-established Uu synchronisation concerns one or more Radio Link Sets, the Node B shall indicate the affected Radio Link Set(s) using the *RL Set Information IE*.]

8.3.13.3 Abnormal Condition

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8.3.14 Compressed Mode Command [FDD]

8.3.14.1 General

The Compressed Mode Command procedure is used to activate or deactivate the compressed mode in the Node B for one Node B Communication Context~~UE-UTRAN connection~~.

The Compressed Mode Command procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.14.2 Successful Operation



Figure 47: Compressed Mode Command procedure, Successful Operation

The procedure is initiated by the CRNC sending a COMPRESSED MODE COMMAND message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

The Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the *CM Configuration Change CFN* IE requested by the CRNC when receiving the COMPRESSED MODE COMMAND message from the CRNC. From that moment on, all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions (if present) shall be started when the indicated *TGCFN* IE elapses. The *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value.

If the values of the *CM Configuration Change CFN* IE and the *TGCFN* IE are equal, the concerned inged Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CM Configuration Change CFN* IE.

8.3.14.3 Abnormal Conditions

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8.3.15 Downlink Power Timeslot Control [TDD]

8.3.15.1 General

The purpose of this procedure is to enable the Node B to use the indicated DL Timeslot ISCP values when deciding the DL TX Power for each timeslot.

The Downlink Power Timeslot Control procedure can be initiated by the CRNC at any time when the Node B eCommunication eContext exists, irrespective of other ongoing CRNC initiated dedicated NBAP procedures towards this Node B eCommunication eContext. The only exception occurs when the CRNC has requested the deletion of the last RL via this Node B, in which case the Downlink Power Timeslot Control procedure shall no longer be initiated.

8.3.15.2 Successful Operation



Figure 47A: Downlink Power Timeslot Control procedure, Successful Operation

The procedure is initiated by the CRNC sending a DL POWER TIMESLOT CONTROL REQUEST message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon reception, the Node B shall use the indicated DL Timeslot ISCP value when deciding the DL TX Power for each timeslot as specified in ref. [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged.

If the *Primary CCPCH RSCP* IE is present, the Node B should use the indicated value for HS-DSCH scheduling and transmit power adjustment.

8.3.15.3 Abnormal Conditions

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8.3.16 Radio Link Pre-emption

8.3.16.1 General

This procedure is started by the Node B when resources need to be freed.

The Node B may initiate the Radio Link Pre-emption procedure at any time after establishing a Radio Link.

8.3.16.2 Successful Operation

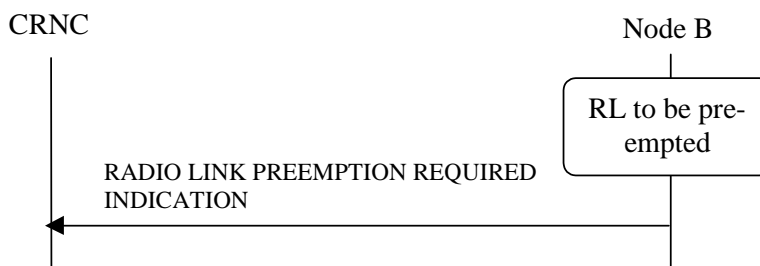


Figure 47B: Radio Link Pre-emption procedure, Successful Operation

When the Node B detects that a one or more Radio Links should be pre-empted, (see Annex A), it shall send the RADIO LINK PREEMPTION REQUIRED INDICATION message to the CRNC using the Communication Control Port assigned to the concerned Node B Communication Context.

If all Radio Links for a CRNC Communication Context ID should be pre-empted, the *RL Information* IE shall be omitted. If one or several but not all Radio Links should be pre-empted for a CRNC Communication Context, the Radio Links that should be pre-empted shall be indicated in the *RL Information* IE. The Radio Link(s) that should be pre-empted should be deleted by the CRNC.

8.3.16.3 Abnormal Conditions

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8.3.17 Bearer Re-arrangement

8.3.17.1 General

This procedure is started by the Node B when Bearers for the Node B Communication Context need to be rearranged.

The Node B may initiate the Bearer Rearrangement procedure at any time after establishing a Radio Link.

8.3.17.2 Successful Operation

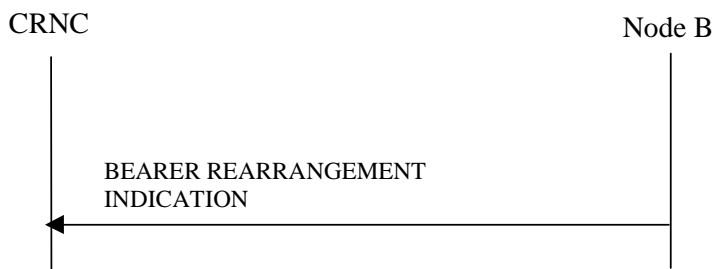


Figure 47C: Bearer Re-arrangement Indication, Successful Operation

When the Node B detects that a signaling bearer or a transport bearer or both need to be re-arranged for the Node B Communication Context, it shall send the BEARER REARRANGEMENT INDICATION message to the CRNC. The message shall use the Communication Control Port assigned for this Node B Communication Context.

If the signaling bearer for the control of the Node B Communication Context needs to be rearranged, the *Signalling Bearer Requested Indicator* IE shall be included in the BEARER REARRANGEMENT INDICATION message.

If the transport bearer for a transport channel needs to be rearranged, the ID of the transport channel for which a new transport bearer is required, shall be included in the BEARER REARRANGEMENT INDICATION message.

[FDD - If the TFCI2 bearer on which the DSCH TFCI Signaling control frames shall be received is required to be re-arranged, the *TFCI2 Bearer Request Indicator* IE shall be included in the BEARER REARRANGEMENT INDICATION message.]

8.3.17.3 Abnormal Conditions

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8.3.18 Radio Link Activation

8.3.18.1 General

This procedure is used to activate or de-activate the DL transmission on the Uu interface regarding selected RLs.

8.3.18.2 Successful Operation



Figure 47D: Radio Link Activation procedure

This procedure is initiated by sending the RADIO LINK ACTIVATION COMMAND message from the CRNC to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context. Upon reception, the Node B shall for each concerned RL:

- if the *Delayed Activation Update* IE indicates "Activate":
- if the *Activation Type* IE equals "Unsynchronised":

- [FDD - start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16].]
- [TDD - start transmission on the new RL immediately as specified in [16].]
- if the *Activation Type* IE equals "Synchronised":
 - [FDD - start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16], however never before the CFN indicated in the *Activation CFN* IE.]
 - [TDD - start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in [16].]
 - [FDD - the Node B shall apply the power level indicated in the *Initial DL Tx Power* IE to the transmission on each DL DPCH of the RL when starting transmission until either UL synchronisation on the Uu interface is achieved for the RLS or power balancing is activated. ~~During this period no~~ inner loop power control shall be performed ~~and, unless activated by the DL POWER CONTROL REQUEST message, no~~ and, unless activated by the DL POWER CONTROL REQUEST message, no power balancing shall be performed. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) and downlink power balancing adjustments (see subclause 8.3.7).]
 - [TDD - the Node B shall apply the power level indicated in the *Initial DL Tx Power* IE to the transmission on each DL DPCH and on each Time Slot of the RL when starting transmission until the UL synchronisation on the Uu interface is achieved for the RL. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]
 - [FDD - if the *Propagation Delay* IE is included, the Node B may use this information to speed up the detection of UL synchronisation on the Uu interface.]
 - [FDD - if the *First RLS Indicator* IE is included, it indicates if the concerned RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the Node B together with the value of the *DL TPC pPattern 01 eCount* IE which the Node B has received in the Cell Setup procedure, to determine the initial TPC pattern in the DL of the concerned RL and all RLS which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]
- if the *Delayed Activation Update* IE indicates "Deactivate":
 - stop DL transmission immediately, if the *Deactivation Type* IE equals "Unsynchronised", or at the CFN indicated by the *Deactivation CFN* IE, if the *Deactivation Type* IE equals "Synchronised".

8.3.18.3 Abnormal Conditions

[FDD- If the *Delayed Activation Update* IE is included in the RADIO LINK ACTIVATION COMMAND message, it indicates "Activate" and the *First RLS Indicator* IE is not included, the Node B shall initiate the ERROR INDICATION procedure.]

8.4 Error Handling Procedures

8.4.1 Error Indication

8.4.1.1 General

The Error Indication procedure is initiated by a node in order to report detected errors in one incoming message, provided they cannot be reported by an appropriate response message.

8.4.1.2 Successful Operation

When the conditions defined in subclause 10 are fulfilled, the Error Indication procedure is initiated by an ERROR INDICATION message sent from the receiving node.

When the ERROR INDICATION message is sent from a Node B to its CRNC, the *CRNC Communication Context ID IE* shall be included in the message if available. When the ERROR INDICATION message is sent from a CRNC to a Node B, the *Node B Communication Context ID IE* shall be included in the message if available.

When a message for a dedicated procedure is received in the Node B with an invalid *Node B Communication Context ID IE*, the Node B shall include the unknown *Node B Communication Context ID IE* from the received message in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

When a message for a dedicated procedure is received in the CRNC with an invalid *CRNC Communication Context ID IE*, the CRNC shall include the unknown *CRNC Communication Context ID IE* from the received message in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

The ERROR INDICATION message shall include either the *Cause IE*, or the *Criticality Diagnostics IE*, or both the *Cause IE* and the *Criticality Diagnostics IE*.

Typical cause values for the ERROR INDICATION message are:

Protocol Causes:

- Transfer Syntax Error
- Abstract Syntax Error (Reject)
- Abstract Syntax Error (Ignore and Notify)
- Message not Compatible with Receiver State
- Unspecified

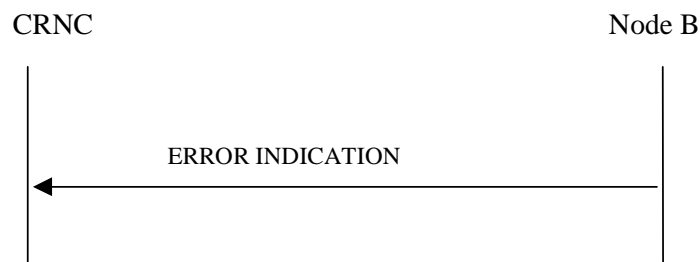


Figure 49: Error Indication procedure (Node B to CRNC): Successful Operation

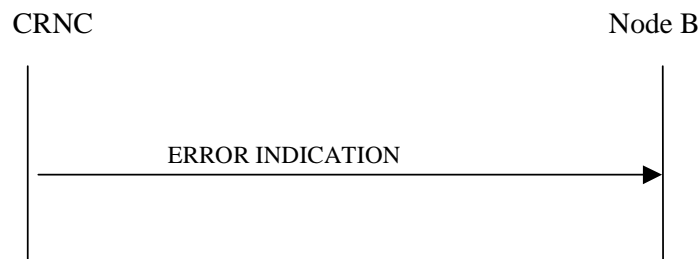


Figure 50: Error Indication procedure (CRNC to Node B), Successful Operation

8.4.1.3 Abnormal Conditions

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9 Elements for NBAP communication

9.1 Message Functional Definition and Contents

9.1.1 General

Subclause 9.1 presents the contents of NBAP messages in tabular format. The corresponding ASN.1 definition is presented in subclause 9.3. In case there is contradiction between the tabular format in subclause 9.1 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional IEs, where the tabular format shall take precedence.

NOTE: The messages have been defined in accordance to the guidelines specified in ref. [26].

9.1.2 Message Contents

9.1.2.1 Presence

An information element can be of the following types:

M	IEs marked as Mandatory (M) shall always be included in the message.
O	IEs marked as Optional (O) may or may not be included in the message.
C	IEs marked as Conditional (C) shall be included in a message only if the condition is satisfied. Otherwise the IE shall not be included.

In case of an **i**nformation **e**lement group, the group is preceded by a name for the info group (in bold). It is also indicated how many times a group may be repeated in the message and whether the group is conditional. The presence field of the **i**nformation **e**lements inside one group defines if the **i**nformation **e**lement is mandatory, optional or conditional if the group is present. if the group is present.

9.1.2.2 Criticality

Each **i**nformation **e**lement or Group of **i**nformation **e**lements may have a criticality information applied to it. Following cases are possible:

-	No criticality information is applied explicitly.
YES	Criticality information is applied. 'YES' is usable only for non-repeatable information elements.
GLOBAL	The information element and all its repetitions together have one common criticality information. 'GLOBAL' is usable only for repeatable information elements.
EACH	Each repetition of the information element has its own criticality information. It is not allowed to assign different criticality values to the repetitions. 'EACH' is usable only for repeatable information elements.

9.1.2.3 Range

The Range column indicates the allowed number of copies of repetitive IEs/AEs.

9.1.2.4 Assigned Criticality

This column provides the actual criticality information as defined in subclause 10.3.2, if applicable.

9.1.3 —COMMON TRANSPORT CHANNEL SETUP REQUEST

9.1.3.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
CHOICE <i>Common Physical Channel To Be Configured</i>	M				YES	ignore
>Secondary CCPCH					–	
>>Secondary CCPCH		1				
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>FDD SCCPCH Offset	M		9.2.2.15	Corresponds to [7]: S-CCPCH,k	–	
>>>DL Scrambling Code	C-PCH		9.2.2.13		–	
>>>FDD DL Channelisation Code Number	M		9.2.2.14		–	
>>>TFCS	M		9.2.1.58	For the DL.	–	
>>>Secondary CCPCH Slot Format	M		9.2.2.43		–	
>>>TFCI Presence	C ₂ SlotFormat		9.2.1.57	Refer to TS [7]	–	
>>>Multiplexing Position	M		9.2.2.23		–	
>>>Power Offset Information		14			–	
>>>>PO1	M		Power Offset 9.2.2.29	Power offset for the TFCI bits	–	
>>>>PO3	M		Power Offset 9.2.2.29	Power offset for the pilot bits	–	
>>>STTD Indicator	M		9.2.2.48		–	
>>>FACH Parameters		0..<maxno ofFACHs>			GLOBAL	reject
>>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>>Transport Format Set	M		9.2.1.59	For the DL.	–	
>>>>ToAWS	M		9.2.1.61		–	
>>>>ToAWE	M		9.2.1.60		–	
>>>>Max FACH Power	M		DL Power 9.2.1.21	Maximum allowed power on the FACH.	–	
>>>>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>Transport Layer Address	O		9.2.1.63	Shall be ignored if	YES	ignore

				bearer establishment with ALCAP.		
>>>PCH Parameters		0..1			YES	reject
>>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>>Transport Format Set	M		9.2.1.59	For the DL.	-	
>>>>ToAWS	M		9.2.1.61		-	
>>>>ToAWE	M		9.2.1.60		-	
>>>>PCH Power	M		DL Power 9.2.1.21		-	
>>>>PICH Parameters		1			-	
>>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>>FDD DL Channelisation Code Number	M		9.2.2.14		-	
>>>>>PICH Power	M		9.2.1.49A		-	
>>>>>PICH Mode	M		9.2.2.26	Number of PI per frame	-	
>>>>>STTD Indicator	M		9.2.2.48		-	
>>>>-Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>-Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>PRACH					-	
>>PRACH		1				
>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>Scrambling Code Number	M		9.2.2.42		-	
>>>TFCS	M		9.2.1.58	For the UL.	-	
>>>Preamble Signatures	M		9.2.2.31		-	
>>>Allowed Slot Format Information		$1..<M_{max} \text{ noofSlotFormatsPRA CH}>$			-	
>>>>RACH Slot Format	M		9.2.2.37		-	
>>>>RACH Sub Channel Numbers	M		9.2.2.38		-	
>>>Puncture Limit	M		9.2.1.50	For the UL	-	
>>>Preamble Threshold	M		9.2.2.32		-	
>>>RACH Parameters		1			YES	Rreject
>>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>>Transport Format Set	M		9.2.1.59	For the UL.	-	

>>>>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>AICH Parameters		1			-	
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>AICH Transmission Timing	M		9.2.2.1		-	
>>>>FDD DL Channelisation Code Number	M		9.2.2.14		-	
>>>>AICH Power	M		9.2.2.D		-	
>>>>STTD Indicator	M		9.2.2.48		-	
>PCPCHes					-	
>>CPCH Parameters		1			-	
>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>Transport Format Set	M		9.2.1.59	For the UL.	-	
>>>AP Preamble Scrambling Code	M		CPCH Scrambling Code Number 9.2.2.4B		-	
>>>CD Preamble Scrambling Code	M		CPCH Scrambling Code Number 9.2.2.4B		-	
>>>TFCS	M		9.2.1.58	For the UL	-	
>>>CD Signatures	O		Preamble Signatures 9.2.2.31	Note: When not present, all CD signatures are to be used.	-	
>>>CD Sub Channel Numbers			9.2.2.1C		-	
>>>Puncture Limit	M		9.2.1.50	For the UL	-	
>>>CPCH UL DPCCH Slot Format	M		9.2.2.4C	For UL CPCH message control part	-	
>>>UL SIR	M		UL SIR 9.2.1.67A		-	
>>>Initial DL Transmission Power	M		DL Power 9.2.1.21		-	
>>>Maximum DL Power	M		DL Power 9.2.1.21		-	
>>>Minimum DL Power	M		DL Power 9.2.1.21		-	
>>>PO2	M		Power Offset 9.2.2.29	Power offset for the TPC bits relative to the	-	

				pilot bits.		
>>>FDD TPC DL Step Size	M		9.2.2.16		-	
>>>N_Start_Message	M		9.2.2.23C		-	
>>>N_EOT	M		9.2.2.23A		-	
>>>Channel Assignment Indication	M		9.2.2.1D		-	
>>>CPCH Allowed Total Rate	M		9.2.2.4A		-	
>>>PCPCH Channel Information		1..<maxno ofPCPCHs >			-	
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>CPCH Scrambling Code Number	M		9.2.2.4B	For UL PCPCH	-	
>>>>DL Scrambling Code	M		9.2.2.13	For DL CPCH message part	-	
>>>>FDD DL Channelisation Code Number	M		9.2.2.14	For DL CPCH message part	-	
>>>>PCP Length	M		9.2.2.24A		-	
>>>>UCSM Information	C-NCA	1			-	
>>>>>Min UL Channelisation Code Length	M		9.2.2.22		-	
>>>>>NF_max	M		9.2.2.23B		-	
>>>>>Channel Request Parameters		0..<maxA PSigNum>			-	
>>>>>AP Preamble Signature	M		9.2.2.1A		-	
>>>>>AP Sub Channel Number	O		9.2.2.1B		-	
>>>VCAM Mapping Information	C-CA	1..<maxno ofLen>		Refer to TS [18]	-	
>>>>Min UL Channelisation Code Length	M		9.2.2.22		-	
>>>>NF_max	M		9.2.2.23B		-	
>>>>Max Number of PCPCHes	M		9.2.2.20A		-	
>>>>SF Request Parameters		1..<maxA PSigNum>			-	
>>>>>AP Preamble Signature	M		9.2.2.1A		-	
>>>>>AP Sub Channel Number	O		9.2.2.1B		-	
>>>>AP-AICH Parameters		1			-	
>>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>>FDD DL Channelisation Code Number	M		9.2.2.14		-	

>>>>AP-AICH Power	M		AICH Power 9.2.2.D		-	
>>>>CSICH Power	M		AICH Power 9.2.2.D	For CSICH bits at end of AP-AICH slot	-	
>>>>STTD Indicator	M		9.2.2.48		-	
>>>>CD/CA-ICH Parameters		1			-	
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>FDD DL Channelisation Code Number	M		9.2.2.14		-	
>>>>CD/CA-ICH Power	M		AICH Power 9.2.2.D		-	
>>>>STTD Indicator	M		9.2.2.48		-	
>>>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore

Condition	Explanation
SlotFormat	The IE shall be present if the <i>Secondary CCPCH Slot Format</i> IE is set to any of the values from 8 to 17.
CA	The IE shall be present if the <i>Channel Assignment Indication</i> IE is set to <u>""CA Active""</u> .
NCA	The IE shall be present if the <i>Channel Assignment Indication</i> IE is set to <u>""CA Inactive""</u> .
PCH	The IE shall be present if the <i>PCH Parameters</i> IE is not present.

Range bBound	Explanation
<i>MmaxnoofFACHs</i>	Maximum number of FACHs that can be defined on a Secondary CCPCH.
<i>MmaxnoofPCPCHs</i>	Maximum number of PCPCHs for a CPCH
<i>MmaxnoofLen</i>	Maximum number of Min UL Channelisation Code Length
<i>MmaxnoofSlotFormatsPRACH</i>	Maximum number of SF for a PRACH
<i>MmaxAPSigNum</i>	Maximum number of AP Signatures.

9.1.3.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
CHOICE <i>Common Physical Channel To Be Configured</i>	M				YES	ignore
>>>Secondary CCPCHs					–	
>>>SCCPCH CCH ID	M		CCH ID 9.2.3.3	For DL CCH supporting one or several Secondary CCPCHs	–	
>>>TFCS	M		9.2.1.58	For DL CCH supporting one or several Secondary CCPCHs	–	
>>>TFCI Coding	M		9.2.3.22		–	
>>>Puncture Limit	M		9.2.1.50		–	
>>>Secondary CCPCH		0..<maxno ofSCCPCHs>		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD, only	GLOBAL	reject
>>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>>TDD Channelisation Code	M		9.2.3.19		–	
>>>>Time Slot	M		9.2.3.23		–	
>>>>Midamble Shift and Burst Type	M		9.2.3.7		–	
>>>>TDD Physical Channel Offset	M		9.2.3.20		–	
>>>>Repetition Period	M		9.2.3.16		–	
>>>>Repetition Length	M		9.2.3.15		–	
>>>>SCCPCH Power	M		DL Power 9.2.1.21		–	
>>>>FACH		0..<maxno ofFACHs>			GLOBAL	reject
>>>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>>>FACH CCH ID	M		CCH ID 9.2.3.3		–	
>>>>>Transport Format Set	M		9.2.1.59	For the DL.	–	
>>>>>ToAWS	M		9.2.1.61		–	
>>>>>ToAWE	M		9.2.1.60		–	
>>>>>Max FACH Power	O		DL Power 9.2.1.21	Applicable to For 1.28Mcps TDD only	YES	reject

>>>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>PCH		0..1			YES	reject
>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>PCH CCTrCH ID	M		CCTrCH ID 9.2.3.3		-	
>>>Transport Format Set	M		9.2.1.59	For the DL.	-	
>>>ToAWS	M		9.2.1.61		-	
>>>ToAWE	M		9.2.1.60		-	
>>>>PICH Parameters		0..1		Mandatory Ffor 3.84Mcps TDD Not Applicable to 1.28Mcps TDD, only	YES	reject
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>>>>Time Slot	M		9.2.3.23		-	
>>>>Midamble sShift and Burst Type	M		9.2.3.7		-	
>>>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>>>Repetition pPeriod	M		9.2.3.16		-	
>>>>Repetition lLength	M		9.2.3.15		-	
>>>>Paging Indicator Length	M		9.2.3.8		-	
>>>>PICH Power	M		9.2.1.49A		-	
>>>PCH Power	O		DL Power 9.2.1.21	Applicable to For 1.28Mcps TDD only	-YES	reject
>>>>PICH Parameters LCR		0..1		Mandatory Ffor 1.28Mcps TDD Not Applicable to 3.84Mcps TDD, only	YES	reject
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
>>>>Time Slot LCR	M		9.2.3.24A		-	
>>>>Midamble sShift LCR	M		9.2.3.7A		-	
>>>>TDD Physical Channel Offset	M		9.2.3.20		-	

>>>>Repetition pPeriod	M		9.2.3.16		-	
>>>>Repetition LLength	M		9.2.3.15		-	
>>>>Paging Indicator Length	M		9.2.3.8		-	
>>>>PICH Power	M		9.2.1.49A		-	
>>>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>Secondary CCPCH LCR		0..<maxno ofS- CCPCHsL CRs>		Mandatory Ffor 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD-only	GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble sShift LCR	M		9.2.3.7A		-	
>>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>>Repetition Period	M		9.2.3.16		-	
>>>Repetition Length	M		9.2.3.15		-	
>>>SCCPCH Power	M		DL Power 9.2.1.21		-	
>PRACH					-	
>>>PRACH	M	0..1		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD-only	YES	reject
>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>TFCS	M		9.2.1.58		-	
>>>Time Slot	M		9.2.3.23		-	
>>>TDD Channelisation Code	M		9.2.3.19		-	
>>>Max PRACH Midamble Shifts	M		9.2.3.6		-	
>>>PRACH Midamble	M		9.2.3.14		-	
>>>>RACH		1			YES	reject
>>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>>Transport Format Set	M		9.2.1.59	For the UL	-	
>>>>Binding ID	O		9.2.1.4	Shall be ignored if bearer	YES	ignore

				establishment with ALCAP.		
>>>>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>PRACH LCR		0..<maxnoof PRACHLCRs>		Mandatory Ffor 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD-only	YESGLOBAL	reject
>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>TFCS	M		9.2.1.58		-	
>>>>Time Slot LCR	M		9.2.3.24A		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
>>>>Max PRACH Midamble Shifts	M		9.2.3.6		-	
>>>>PRACH Midamble	M		9.2.3.14		-	
>>>>>RACH		1			YES	reject
>>>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>>>Transport Format Set	M		9.2.1.59	For the UL	-	
>>>>>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>>FPACH		0..1		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD-only	GLOBALYES	reject
>>>>>Common Physical Channel ID	M		9.2.1.13		-	
>>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
>>>>>Time Slot LCR	M		9.2.3.24A		-	
>>>>>Midamble Shift LCR	M		9.2.3.7A		-	
>>>>>Max FPACH Power	M		9.2.3.5E		-	

Range bBound	Explanation
$M_{maxnoofSCCPCHs}$	Maximum number of Secondary CCPCHs per CCTrCH for 3.84Mcps TDD.
$M_{maxnoofS-CCPCHsLCRs}$	Maximum number of Secondary CCPCHs per CCTrCH for 1.28Mcps TDD.
$M_{maxnoofCCTrCHs}$	Maximum number of CCTrCHs that can be defined in a cell.
$M_{maxnoofFACHs}$	Maximum number of FACHs that can be defined on a Secondary CCPCH.
$M_{maxnoofPRACHLCRs}$	Maximum number of PRACHs LCR that can be defined on a RACH for 1.28Mcps TDD.

9.1.4 COMMON TRANSPORT CHANNEL SETUP RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
FACH Parameters Info		$0..<maxnoofFACHs>$		The FACH Parameters may be combined with PCH Parameters	GLOBAL	ignore
>FACH Parameters	M		Common Transport Channel Information Response 9.2.1.14A		–	
PCH Parameters	O		Common Transport Channel Information Response 9.2.1.14A	The PCH Parameters may be combined with FACH Parameters	YES	ignore
RACH Parameters	O		Common Transport Channel Information Response 9.2.1.14A	The RACH Parameters shall not be combined with FACH Parameters or PCH Parameters	YES	ignore
CPCH Parameters	O		Common Transport Channel Information Response 9.2.1.14A	The CPCH Parameters shall not be combined with FACH Parameters or PCH Parameters or RACH Parameters	YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range bBound	Explanation
$M_{maxnoofFACHs}$	Maximum number of FACHs that can be defined on a Secondary CCPCH[FDD] / a group of Secondary CCPCHs [TDD].

9.1.5 COMMON TRANSPORT CHANNEL SETUP FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	–
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	–
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.6 COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST

9.1.6.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
CHOICE <i>Common Physical Channel To Be Configured</i>	M				YES	reject
>>Secondary CCPCH					–	
>>FACH Parameters		0..<maxFACHCell>			GLOBAL	reject
>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>Max FACH Power	O		DL Power 9.2.1.21	Maximum allowed power on the FACH.	–	
>>>ToAWS	O		9.2.1.61		–	
>>>ToAWE	O		9.2.1.60		–	
>>PCH Parameters		0..1			YES	reject
>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>PCH Power	O		DL Power 9.2.1.21	Power to be used on the PCH.	–	
>>>ToAWS	O		9.2.1.61		–	
>>>ToAWE	O		9.2.1.60		–	
>>PICH Parameters		0..1			YES	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>PICH Power	O		9.2.1.49A		–	
>PRACH					–	
>>PRACH Parameters		0..<MaxPRACHCell>			GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>Preamble Signatures	O		9.2.2.31		–	
>>>Allowed Slot Format Information		0..<MaxPRACHCell>			–	
>>>>RACH Slot Format	M		9.2.2.37		–	
>>>>RACH Sub Channel Numbers	O		9.2.2.38		–	
>>AICH Parameters		0..<MaxPRACHCell>			GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	

>>>AICH Power	O		9.2.2.D		–	
>CPCH					–	
>>CPCH Parameters		0..<maxno ofCPCHs>			GLOBAL	reject
>>>Common Transport Channel ID	M		9.2.1.14		–	
>>>UL SIR	O		9.2.1.67A		–	
>>>Initial DL Transmission Power	O		DL Power 9.2.1.21		–	
>>>Maximum DL Power	O		DL Power 9.2.1.21		–	
>>>Minimum DL Power	O		DL Power 9.2.1.21		–	
>>AP-AICH Parameters		0..<maxno ofCPCHs>			GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>AP-AICH Power	O		AICH Power 9.2.2.D		–	
>>>CSICH Power	O		AICH Power 9.2.2.D	For CSICH bits at end of AP-AICH slot	–	
>>CD/CA-ICH Parameters		0..<maxno ofCPCHs>			GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		–	
>>>CD/CA-ICH Power	O		AICH Power 9.2.2.D		–	

Range bBound	Explanation
maxFACHCell/MaxFACHCell	Maximum number of FACHs that can be defined in a Cell
maxnoofCPCHsMaxnoofCPCHs	Maximum number of CPCHs that can be defined in a Cell
maxPRACHCell/MaxPRACHCell	Maximum number of PRACHs and AICHes that can be defined in a Cell
maxnoofSlotFormatsPRACH/MaxnoofSlotFormatsPRACH	Maximum number of SF for a PRACH

9.1.6.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Secondary CCPCH Parameters		0..10..4			YES	reject

>CCTrCH ID	M		9.2.3.3	For DL CCTrCH supporting one or several Secondary CCPCHs	–	
>Secondary CCPCHs to Be Configured		<i>0..<maxno ofSCCPCHs>0..<MaxnoofSCCPCHs></i>			GLOBAL	reject
>>Common Physical Channel ID	M		9.2.1.13		–	
>>SCCPCH Power	O		DL power 9.2.1.21		–	
PICH Parameters		<i>0..10..4</i>			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>PICH Power	O		9.2.1.49A		–	
FACH pParameters		<i>0..<Mmax noofFACHs></i>			GLOBAL	reject
>Common Transport Channel ID	M		9.2.1.14		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	
>Max FACH Power	O		DL Power 9.2.1.21	Applicable to F _{ach} 1.28Mcps TDD only	YES	reject
PCH pParameters		<i>0..10..4</i>			YES	reject
>Common Transport Channel ID	M		9.2.1.14		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	
>PCH Power	O		DL Power 9.2.1.21	Applicable to F _{ach} 1.28Mcps TDD only	YES	reject
FPACH pParameters		<i>0..10..4</i>		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Max FPACH Power	O		9.2.3.5E		–	

Range b Bound	Explanation
<i>maxnoofSCCPCHsMaxnoofSCCPCHs</i>	Maximum number of SCCPCHs that can be repeated in a Cell
<i>maxnoofFACHsMaxnoofFACHs</i>	Maximum number of FACHs that can be repeated in a Cell

9.1.7 COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.8 COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.9 COMMON TRANSPORT CHANNEL DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Common Physical Channel ID	M		9.2.1.13	Indicates the Common Physical Channel for which the Common Transport Channels (together with the Common Physical Channel) shall be deleted.	YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject

9.1.10 COMMON TRANSPORT CHANNEL DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.11 BLOCK RESOURCE REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Blocking Priority Indicator	M		9.2.1.5		YES	reject
-Shutdown Timer	C-BlockNormal		9.2.1.56		YES	reject

Condition	Explanation
BlockNormal	The IE shall be present if the <i>Blocking Priority Indicator</i> IE indicates "Normal Priority".

9.1.12 BLOCK RESOURCE RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.13 BLOCK RESOURCE FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.14 UNBLOCK RESOURCE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	ignore

9.1.15 AUDIT REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	

9.1.16 AUDIT REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Start Of Audit Sequence Indicator	M		9.2.1.56B		YES	reject

9.1.17 AUDIT RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
End Of Audit Sequence Indicator	M		9.2.1.29A		YES	ignore
Cell Information		<i>0..<maxCellsInNodeB> 0..<maxCellsInNodeB></i>			EACH	ignore
>C-ID	M		9.2.1.9		–	
>Configuration Generation ID	M		9.2.1.16		–	
>Resource Operational State	M		9.2.1.52		–	
>Availability Status	M		9.2.1.2		–	
>Local Cell ID	M		9.2.1.38	The local cell that the cell is configured on	–	
>Primary SCH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>Secondary SCH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>Primary CPICH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>Secondary CPICH Information		<i>0..<maxSecondaryCPICHCells></i>			EACH	ignore
>>Secondary CPICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>Primary CCPCH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>BCH Information	O		Common Transport Channel Status		YES	ignore

			Information 9.2.1.1.3A4 B			
>Secondary CCPCH Information		$0..<maxS$ $CCPCHCell$ $>$			EACH	ignore
>>Secondary CCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>PCH Information	O		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>PICH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>FACH Information		$0..<maxFA$ $CHCell$ $>$			EACH	ignore
>>FACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>PRACH Information		$0..<maxP$ $RACHCell$ $>$			EACH	ignore
>>PRACH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>RACH Information		$0..<maxR$ $ACHCell$ $>$			EACH	ignore
>>RACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>AICH Information		$0..<maxP$ $RACHCell$ $>$			EACH	ignore
>>AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>PCPCH Information		$0..<maxP$ $CPCHCell$ $>$			EACH	ignore

		>				
>>PCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>CPCH Information		0..<maxCPCHCell>			EACH	ignore
>>CPCH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>AP-AICH Information		0..<maxCPCHCell>			EACH	ignore
>>AP-AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>CD/CA-ICH Information		0..<maxCPCHCell>			EACH	ignore
>>CD/CA-ICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>SCH Information	O		Common Physical Channel Status Information 9.2.1.13A	TDD Sync Channel	YES	ignore
>FPACH Information		0..<maxFPACHCell>		Applicable to Fdd-1.28Mcps TDD only	EACH	ignore
–>>FPACH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>DwPCH Information>DwPCH Information	O		Common Physical Channel Status Information 9.2.1.13A	Applicable to Fdd-1.28Mcps TDD only	YES	ignore
Communication Control Port Information		0..<maxCCPINNodeB>			EACH	ignore
>Communication Control Port ID	M		9.2.1.15		–	
>Resource Operational State	M		9.2.1.52		–	

>Availability Status	M		9.2.1.2		–	
Local Cell Information		0.. <maxLocal CellinNode B>			EACH	ignore
>Local Cell ID	M		9.2.1.38		–	
>DL or Global Capacity Credit	M		9.2.1.20B		–	
>UL Capacity Credit	O		9.2.1.65A		–	
>Common Channels Capacity Consumption Law	M		9.2.1.9A		–	
>Dedicated Channels Capacity Consumption Law	M		9.2.1.20A		–	
>Maximum DL Power Capability	O		9.2.1.39		–	
>Minimum Spreading Factor	O		9.2.1.47		–	
>Minimum DL Power Capability	O		9.2.1.46A		–	
>Local Cell Group ID	O		9.2.1.37A		–	
>Reference Clock aAvailability	O		9.2.3.14A	TDD only	YES	ignore
>Power Local Cell Group ID	O		9.2.1.49B		YES	ignore
Local Cell Group Information		0.. <maxLocal CellinNode B>			EACH	ignore
>Local Cell Group ID	M		9.2.1.37A		–	
>DL or Global Capacity Credit	M		9.2.1.20B		–	
>UL Capacity Credit	O		9.2.1.65A		–	
>Common Channels Capacity Consumption Law	M		9.2.1.9A		–	
>Dedicated Channels Capacity Consumption Law	M		9.2.1.20A		–	
Power Local Cell Group Information		0.. <maxLocal CellinNode B>			EACH	ignore
>Power Local Cell Group ID	M		9.2.1.49B		–	
>Maximum DL Power Capability	M		9.2.1.39		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range bBound	Explanation
<u>maxCellinNodeB</u> / <u>MaxCellinNodeB</u>	Maximum number of Cell <u>s</u> that can be configured in Node B
<u>maxCCPinNodeB</u> / <u>MaxCCPinNodeB</u>	Maximum number of eC <u>ommunication</u> eC <u>ontrol</u> p <u>orts</u> that can exist in the Node B
<u>maxCPCHCell</u> / <u>MaxGPCHCell</u>	Maximum number of CPCH <u>es</u> that can be defined in a Cell
<u>maxLocalCellinNodeB</u> / <u>MaxLocalCellinNodeB</u>	Maximum number of Local Cells that can exist in the Node B
<u>maxPCPCHCell</u> / <u>MaxPCPCHCell</u>	Maximum number of PCPCH <u>es</u> that can be defined in a Cell
<u>maxSCPICHCell</u> / <u>MaxSCPICHCell</u>	Maximum number of Secondary CPICH <u>s</u> that can be defined in a Cell.
<u>maxSCCPCHCell</u> / <u>MaxSCCPCHCell</u>	Maximum number of Secondary CCPCH <u>s</u> that can be defined in a Cell.
<u>maxFACHCell</u> / <u>MaxFACHCell</u>	Maximum number of FACH <u>es</u> that can be defined in a Cell
<u>maxPRACHCell</u> / <u>MaxPRACHCell</u>	Maximum number of PRACH <u>es</u> that can be defined in a Cell
<u>maxRACHCell</u> / <u>MaxRACHCell</u>	Maximum number of RACH <u>es</u> that can be defined in a Cell
<u>maxFPACHCell</u> / <u>MaxFPACHCell</u>	Maximum number of FPACH <u>es</u> that can be defined in a Cell

9.1.17A AUDIT FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality diagnostics	O		9.2.1.17		YES	ignore

9.1.18 COMMON MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	reject
Common Measurement Object Type	M		9.2.1.10		YES	reject
CHOICE Common-Common Measurement Object Type	M				YES	reject
>>Cell					–	
>>C-ID	M		9.2.1.9		–	
>>Time Slot	O		9.2.3.23	Applicable to For 3.84Mcps TDD only	–	
>>Time Slot LCR	O		9.2.3.24A	Applicable to For 1.28Mcps TDD only	YES	reject
>>Neighbouring Cell Measurement Information		0..<maxno MeasNCells> s>0..<max noMeasN Cells>			GLOBAL	ignore
>>>CHOICE Neighbouring Cell Measurement Information					–	–
>>>> Neighbouring FDD Cell Measurement Information				FDD only	–	–
—>>>> Neighbouring FDD Cell Measurement Information	M		9.2.1.47C		–	–
>>>> Neighbouring TDD Cell Measurement Information				Applicable to 3.84Mcps TDD only	–	–
—>>>> Neighbouring TDD Cell Measurement Information	M		9.2.1.47D		–	–
>>>>>> Neighbouring TDD Cell Measurement Information LCR				Applicable to 1.28Mcps TDD only	–	–
>>>>> Neighbouring TDD Cell Measurement Information LCR	M		9.2.1.47E		–	–
>>>>>> RACH				FDD only	–	
>>C-ID	M		9.2.1.9		–	
>>Common Transport Channel ID	M		9.2.1.14		–	
>>>CPCH				FDD only	–	
>>C-ID	M		9.2.1.9		–	
>>Common Transport Channel ID	M		9.2.1.14		–	
>>Spreading Factor	O		Minimum UL Channelisat		–	

			ion Code Length 9.2.2.22			
Common Measurement Type	M		9.2.1.11		YES	reject
Measurement Filter Coefficient	O		9.2.1.41		YES	reject
Report Characteristics	M		9.2.1.51		YES	reject
SFN r Reporting i ndicator	M		FN r Reporting i ndicator 9.2.1.29B		YES	reject
SFN	O		9.2.1.53A		YES	reject
Common Measurement Accuracy	O		9.2.1.9B		YES	reject

Range b Bound	Explanation
maxnoMeasNCells maxnoMeasNCells	Maximum number of neighbouring cells that can be measured on.

9.1.19 COMMON MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE Common-Common <i>Measurement Object Type</i>	O			Common Measurement Object Type that the measurement was initiated with.	YES	ignore
>>Cell					YES	
>>Common Measurement Value	M		9.2.1.12		-	
>>RACH				FDD only	-	
>>Common Measurement Value	M		9.2.1.12		-	
>>CPCH				FDD only	-	
>>Common Measurement Value	M		9.2.1.12		-	
SFN	O		9.2.1.53A	Common Measurement Time Reference	YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore
Common Measurement Achieved Accuracy	O		Common Measureme nt Accuracy 9.2.1.9B		YES	ignore

9.1.20 COMMON MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.21 COMMON MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE <i>Common Common Measurement Object Type</i>	M			Common Measurement Object Type that the measurement was initiated with.	YES	ignore
<i>>>Cell</i>					–	
<i>>>Common Measurement Value Information</i>	M		9.2.1.12A		–	
<i>>>RACH</i>				FDD only	–	
<i>>>Common Measurement Value Information</i>	M		9.2.1.12A		–	
<i>>>CPCH</i>				FDD only	–	
<i>>>Common Measurement Value Information</i>	M		9.2.1.12A			
SFN	O		9.2.1.53A	Common Measurement Time Reference	YES	ignore

9.1.22 COMMON MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore

9.1.23 COMMON MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore

9.1.24 CELL SETUP REQUEST

9.1.24.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Local Cell ID	M		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
T Cell	M		9.2.2.49		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nu [14]	YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nd [14]	YES	reject

Maximum Transmission Power	M		9.2.1.40		YES	reject
Closed Loop Timing Adjustment Mode	O		9.2.2.2A		YES	reject
Primary Scrambling Code	M		9.2.2.34		YES	reject
Synchronisation Configuration		14			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		–	
>N_OUTSYNC_IND	M		9.2.1.47B		–	
>T_RLFAILURE	M		9.2.1.56A		–	
DL TPC p _P Pattern 01 e _C Count	M		9.2.2.13A		YES	reject
Primary SCH Information		14			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Primary SCH Power	M		DL Power 9.2.1.21		–	
>TSTD Indicator	M		9.2.1.64		–	
Secondary SCH Information		14			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Secondary SCH p _P Power	M		DL Power 9.2.1.21		–	
>TSTD Indicator	M		9.2.1.64		–	
Primary CPICH Information		14			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Primary CPICH power	M		9.2.2.33		–	
>Transmit Diversity Indicator	M		9.2.2.53		–	
Secondary CPICH Information		0..<maxS CPICHCell >0..<maxS CPICHCell >			EACH	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>DL Scrambling e _C Code	M		9.2.2.13		–	
>FDD DL Channelisation Code Number	M		9.2.2.14		–	
>Secondary CPICH Power	M		DL Power 9.2.1.21		–	
>Transmit Diversity Indicator	M		9.2.2.53		–	
Primary CCPCH Information		14			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>>BCH Information		14			–	
>>Common Transport Channel ID	M		9.2.1.14		–	
>>BCH Power	M		DL Power 9.2.1.21		–	
>STTD Indicator	M		9.2.2.48		–	
Limited p_PPower i_Increase i_Information		14			YES	reject
>Power_Raise_Limit	M		9.2.2.29A		–	
>DL_power_averaging_window_size	M		9.2.2.12A		–	
IPDL Parameter Information		0..10..4			YES	reject
>IPDL FDD Parameters	M		9.2.2.18C		–	
>IPDL Indicator	M		9.2.1.36F		–	
PDSCH information		0..10..4			YES	reject
>Maximum PDSCH Power	O		9.2.2.21A		–	

Range b Bound	Explanation
<u>maxSCPICHCell/MaxSCPICHCell</u>	Maximum number of Secondary CPICHs that can be defined in a Cell.

9.1.24.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Local Cell ID	M		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation Id	M		9.2.1.16		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nt [15]	YES	reject
Cell Parameter ID	M		9.2.3.4		YES	reject
Maximum Transmission Power	M		9.2.1.40		YES	reject
Transmission Diversity Applied	M		9.2.3.26	On DCHs	YES	reject
Sync Case	M		9.2.3.18		YES	reject
Synchronisation Configuration		14			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		–	
>N_OUTSYNC_IND	M		9.2.1.47B		–	
>T_RLFAILURE	M		9.2.1.56A		–	
DPCH Constant Value	M		Constant Value		YES	reject
PUSCH Constant Value	M		Constant Value		YES	reject
PRACH Constant Value	M		Constant Value		YES	reject
Timing Advance Applied	M		9.2.3.22A		YES	reject
SCH Information		0..10..4		Mandatory Ffor 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD. only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>CHOICE Sync Case	M				YES	reject
>>>>Case 1					–	
>>>Time Slot	M		9.2.3.23		–	
>>>>Case 2					–	
>>>SCH Time Slot	M		9.2.3.17		–	
>SCH Power	M		DL Power 9.2.1.21		–	
>TSTD Indicator	M		9.2.1.64		–	
PCCPCH Information		0..10..4		Mandatory Ffor 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD. only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>TDD Physical Channel Offset	M		9.2.3.20		–	
>Repetition Period	M		9.2.3.16		–	
>Repetition Length	M		9.2.3.15		–	
>PCCPCH Power	M		9.2.3.9		–	
>SCTD Indicator	M		9.2.3.30		–	
Time Slot Configuration		0..150..15		Mandatory Ffor 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD. only	GLOBAL	reject
>Time Slot	M		9.2.3.23		–	

>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	
Time Slot Configuration LCR		0..7		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD only	GLOBAL	reject
>Time Slot LCR	M		9.2.3.24A		–	
>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	
PCCPCH Information LCR		0..1		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>TDD Physical Channel Offset	M		9.2.3.20		–	
>Repetition Period	M		9.2.3.16		–	
>Repetition Length	M		9.2.3.15		–	
>PCCPCH Power	M		9.2.3.9		–	
>SCTD Indicator	M		9.2.3.30		–	
→TSTD Indicator	M		9.2.1.64		–	
DwPCH Information		0..1		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>TSTD Indicator	M		9.2.1.64		–	
>SYNC_DL Code ID	M		9.2.3.18B		–	
>DwPCH Power	M		9.2.3.5B		–	
Reference SFN Offset	O		9.2.3.14B		YES	ignore
IPDL Parameter Information		0..1		Applicable to For 3.84 Mcps TDD only	YES	reject
>IPDL TDD Parameters	M		9.2.3.5D		–	
>IPDL Indicator	M		9.2.1.36F		–	
IPDL Parameter Information LCR		0..1		Applicable to For 1.28Mcps TDD only	YES	reject
>IPDL TDD Parameters LCR	M		9.2.3.5H		–	
>IPDL Indicator	M		9.2.1.36F		–	

9.1.25 CELL SETUP RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.26 CELL SETUP FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.27 CELL RECONFIGURATION REQUEST

9.1.27.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Maximum Transmission Power	O		9.2.1.40		YES	reject
Synchronisation Configuration		<u>0..10,1</u>			YES	reject
>N_INSYNc_IND	M		9.2.1.47A		–	
>N_OUTSYNc_IND	M		9.2.1.47B		–	
>T_RLFailure	M		9.2.1.56A		–	
Primary SCH Information		<u>0..10,1</u>			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Primary SCH pPower	M		DL Power 9.2.1.21		–	
Secondary SCH Information		<u>0..10,1</u>			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Secondary SCH pPower	M		DL Power 9.2.1.21		–	
Primary CPICH Information		<u>0..10,1</u>			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Primary CPICH pPower	M		9.2.2.33		–	
Secondary CPICH Information		<u>0..<maxS CPICHCell</u> <u>>0..<maxS CPICHCell</u> <u>></u>			YES EACH	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Secondary CPICH Power	M		DL Power 9.2.1.21		–	
Primary CCPCH Information		<u>0..10,1</u>			YES	reject
>>BCH Information		<u>1</u>			–	
>>Common Transport Channel ID	M		9.2.1.14		–	
>>BCH Power	M		DL Power 9.2.1.21		–	
IPDL Parameter Information		<u>0..10,1</u>			YES	reject
>IPDL FDD Parameters	O		9.2.2.18C		–	
>IPDL Indicator	M		9.2.1.36F		–	
PDSCH information		<u>0..10,1</u>			YES	reject
>Maximum PDSCH Power	O		<u>9.2.2.21A</u>		–	

Range bBound	Explanation
<u>maxSCPICHCell/MaxSCPICHCell</u>	Maximum number of Secondary CPICH that can be defined in a Cell.

9.1.27.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Synchronisation Configuration		0..10,1			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		–	
>N_OUTSYNC_IND	M		9.2.1.47B		–	
>T_RLFAILURE	M		9.2.1.56A		–	
Timing Advance Applied	O		9.2.3.22A	Applicable to For 3.84Mcps TDD only	YES	reject
SCH Information		0..10,1		Applicable to For 3.84Mcps TDD only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>SCH Power	M		DL Power 9.2.1.21		–	
PCCPCH Information		0..10,1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>PCCPCH Power	M		9.2.3.9		–	
Maximum Transmission Power	O		9.2.1.40		YES	reject
DPCH Constant Value	O		Constant Value		YES	reject
PUSCH Constant Value	O		Constant Value		YES	reject
PRACH Constant Value	O		Constant Value		YES	reject
Time Slot Configuration		0..150..15		Mandatory For 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD-only	GLOBAL	reject
>Time Slot	M		9.2.3.23		–	
>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	
Time Slot Configuration LCR		0..70..7		Mandatory For 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD-only	GLOBAL	reject
>Time Slot LCR	M		9.2.3.24A		–	
>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	
DwPCH Information		0..10..4		Mandatory For 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD-only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>DwPCH Power	M		9.2.3.5B		–	
IPDL Parameter Information		0..10..4		Applicable to For 3.84Mcps TDD only	YES	reject
>IPDL TDD Parameters	O		9.2.3.5D		–	
>IPDL Indicator	M		9.2.1.36F		–	

IPDL Parameter Information LCR		0..10..4		Applicable to E-UTRAN 1.28Mcps TDD only	YES	reject
>IPDL TDD Parameters LCR	O		9.2.3.5H		–	
>IPDL Indicator	M		9.2.1.36F		–	

9.1.28 CELL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.29 CELL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.30 CELL DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject

9.1.31 CELL DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.32 RESOURCE STATUS INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Indication Type	M		9.2.1.36		YES	ignore
CHOICE <i>Indication Type</i>	M				YES	ignore
>No Failure					–	
>>Local Cell Information		1..<maxLocalCellinNodeB>			EACH	ignore
>>>Local Cell ID	M		9.2.1.38		–	
>>>Add/Delete Indicator	M		9.2.1.1		–	
>>>DL or Global Capacity Credit	C-add		9.2.1.20B		–	
>>>UL Capacity Credit	O		9.2.1.65A		–	
>>>Common Channels Capacity Consumption Law	C-add		9.2.1.9A		–	
>>>Dedicated Channels Capacity Consumption Law	C-add		9.2.1.20A		–	
>>>Maximum DL Power Capability	C-add		9.2.1.39		–	
>>>Minimum Spreading Factor	C-add		9.2.1.47		–	
>>>Minimum DL Power Capability	C-add		9.2.1.46A		–	
>>>Local Cell Group ID	O		9.2.1.37A		–	
>>>Reference Clock Availability	C-add		9.2.3.14A	TDD only	YES	ignore
>>>Power Local Cell Group ID	O		9.2.1.49B		YES	ignore
>>>>Local Cell Group Information		0..<maxLocalCellinNodeB>			EACH	ignore
>>>>Local Cell Group ID	M		9.2.1.37A		–	
>>>>DL or Global Capacity Credit	M		9.2.1.20B		–	
>>>>UL Capacity Credit	O		9.2.1.65A		–	
>>>>Common Channels Capacity Consumption Law	M		9.2.1.9A		–	
>>>>Dedicated Channels Capacity Consumption Law	M		9.2.1.20A		–	
>>>>Power Local Cell Group Information		0..<maxLocalCellinNodeB>			EACH	ignore
>>>>Power Local Cell Group ID	M		9.2.1.49B		–	
>>>>Maximum DL Power Capability	M		9.2.1.39		–	
>Service Impacting					–	
>>Local Cell Information		0..			EACH	ignore

		<maxLocal CellinNode B>				
>>>Local Cell ID	M		9.2.1.38		-	
>>>DL or Global Capacity Credit	O		9.2.1.20B		-	
>>>UL Capacity Credit	O		9.2.1.65A		-	
>>>Common Channels Capacity Consumption Law	O		9.2.1.9A		-	
>>>Dedicated Channels Capacity Consumption Law	O		9.2.1.20A		-	
>>>Maximum DL Power Capability	O		9.2.1.39		-	
>>>Minimum Spreading Factor	O		9.2.1.47		-	
>>>Minimum DL Power Capability	O		9.2.1.46A		-	
>>>Reference Clock aAvailability	O		9.2.3.14A	TDD only	YES	ignore
>>>>Local Cell Group Information		0.. <maxLocal CellinNode B>			EACH	ignore
>>>>Local Cell Group ID	M		9.2.1.37A		-	
>>>>DL or Global Capacity Credit	O		9.2.1.20B		-	
>>>>UL Capacity Credit	O		9.2.1.65A		-	
>>>>Common Channels Capacity Consumption Law	O		9.2.1.9A		-	
>>>>Dedicated Channels Capacity Consumption Law	O		9.2.1.20A		-	
>>>>Power Local Cell Group Information		0.. <maxLocal CellinNode B>			EACH	ignore
>>>>Power Local Cell Group ID	M		9.2.1.49B		-	
>>>>Maximum DL Power Capability	M		9.2.1.39		-	
>>Communication Control Port Information		0.. <maxCCPi nNodeB>			EACH	ignore
>>>>Communication Control Port ID	M		9.2.1.15		-	
>>>>Resource Operational State	M		9.2.1.52		-	
>>>>Availability Status	M		9.2.1.2		-	
>>Cell Information		0.. <maxCelli nNodeB>			EACH	ignore
>>>>C-ID	M		9.2.1.9		-	
>>>>Resource Operational State	O		9.2.1.52		-	
>>>>Availability Status	O		9.2.1.2		-	
>>>>Primary SCH	O		Common Physical	FDD only	YES	ignore

Information			Channel Status Information 9.2.1.13A			
>>>Secondary SCH Information	O		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore
>>>Primary CPICH Information	O		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore
>>>Secondary CPICH Information		$0..<maxS_{CPICHCell}>$		FDD only	EACH	ignore
>>>>Secondary CPICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>Primary CCPCH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>>>BCH Information	O		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>>>Secondary CCPCH Information		$0..<maxS_{CCPCHCell}>$			EACH	ignore
>>>>Secondary CCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>PCH Information	O		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>>>PICH Information	O		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>>>FACH Information		$0..<maxFACHCell>$			EACH	ignore
>>>>FACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>>>PRACH		$0..<maxP>$			EACH	ignore

Information		<i>RACHCell</i> >				
>>>>PRACH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>RACH Information		0.. <maxPRA CHCell>			EACH	ignore
>>>>RACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>>>AICH Information		0.. <maxPRA CHCell>		FDD only	EACH	ignore
>>>>AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>PCPCH Information		0..<maxP CPCHCell >		FDD only	EACH	ignore
>>>>PCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>CPCH Information		0.. <maxCPC HCell>		FDD only	EACH	ignore
>>>>CPCH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		–	
>>>AP-AICH Information		0.. <maxCPC HCell>		FDD only	EACH	ignore
>>>>AP-AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>CD/CA-ICH Information		0.. <maxCPC HCell>		FDD only	EACH	ignore
>>>>CD/CA-ICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>SCH Information	O		Common Physical Channel Status Information 9.2.1.13A	Applicable to 3.84Mcps TDD only	YES	ignore

>>>FPACH Information		0..<maxFPA CHCell>		Applicable to For 1.28Mcps TDD only	EACH	ignore
<ul style="list-style-type: none"> –>>>FPACH – Individual Information 	M		Common Physical Channel Status Information 9.2.1.13A		–	
>>>DwPCH Information	O		Common Physical Channel Status Information 9.2.1.13A	Applicable to For 1.28Mcps TDD only	YES	ignore
Cause	O		9.2.1.6		YES	ignore

Condition	Explanation
add	The IE shall be present if the Add/Delete Indicator IE is set to "Add".

Range bBound	Explanation
MmaxLocalCellinNodeB	Maximum number of Local Cells that can exist in the Node B
MmaxCellinNodeB	Maximum number of C-IDs that can be configured in the Node B
MmaxCPCHCell	Maximum number of CPCHes that can be defined in a Cell
MmaxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.
MmaxSCCPCHCell	Maximum number of Secondary CCPCHs that can be defined in a Cell.
MmaxFACHCell	Maximum number of FACHes that can be defined in a Cell
MmaxPCPCHCell	Maximum number of PCPCHes that can be defined in a Cell
maxPRACHCell/MaxPRACHCell	Maximum number of PRACHes and AICHes that can be defined in a Cell
MmaxCCPinNodeB	Maximum number of eCommunication eControl pPorts that can exist in the Node B
MmaxFPACHCell	Maximum number of FPACHes that can be defined in a Cell

9.1.33 SYSTEM INFORMATION UPDATE REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	

C-ID	M		9.2.1.9		YES	reject
BCCH Modification Time	O		9.2.1.3		YES	reject
MIB/SB/SIB Information		1.. <maxIB>			GLOBAL	reject
>IB Type	M		9.2.1.35		-	
>IB OC ID	M		9.2.1.31A	In one message, every occurrence of IB Type can only be deleted once and/or added once.	-	
>CHOICE <i>IB Deletion Indicator</i>	M				-	
>>No Deletion					-	
>>>SIB Originator	C-SIB		9.2.1.55		-	
>>>IB SG REP	O		9.2.1.34		-	
>>>Segment Information		1.. <maxIBSEG>			GLOBAL	reject
>>>>IB SG POS	O		9.2.1.33		-	
>>>>Segment <i>IB Type</i>	C- CRNCOri gination		9.2.1.53B		-	
>>>>IB SG DATA	C- CRNCOri gination		9.2.1.32		-	
>>>>Deletion			NULL		-	

Range bound	Explanation
1..maxIB	Maximum number of information Blocks supported in one message.
1..maxIBSEG	Maximum number of -segments for one Information Block

Condition	Explanation
CRNCOri gination	The IE shall be present if the <i>SIB Originator</i> IE is set to "CRNC" or if the <i>IB Type</i> IE is set to "MIB", "SB1" or "SB2".
SIB	The IE shall be present if the <i>IB Type</i> IE is set to "SIB".

9.1.34 SYSTEM INFORMATION UPDATE RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.35 SYSTEM INFORMATION UPDATE FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.36 RADIO LINK SETUP REQUEST

9.1.36.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL DPCH Information		14			YES	reject
>UL Scrambling Code	M		9.2.2.59		–	
>Min UL Channelisation Code Length	M		9.2.2.22		–	
>Max Number of UL DPDCHs	C-CodeLen		9.2.2.21		–	
>Puncture Limit	M		9.2.1.50	For UL	–	
>TFCS	M		9.2.1.58	For UL	–	
>UL DPCH Slot Format	M		9.2.2.57		–	
> UL SIR Target	M		UL SIR 9.2.1.67A		–	
>Diversity Mode	M		9.2.2.9		–	
>SSDT Cell ID Length	O		9.2.2.45		–	
>S Field Length	O		9.2.2.40		–	
>DPC Mode	O		9.2.2.13C		YES	reject
DL DPCH Information		14			YES	reject
>TFCS	M		9.2.1.58	For DL	–	
>DL DPCH Slot Format	M		9.2.2.10		–	
>TFCI Signalling Mode	M		9.2.2.50		–	
>TFCI Presence	C-SlotFormat		9.2.1.57		–	
>Multiplexing Position	M		9.2.2.23		–	
>PDSCH RL ID	C-DSCH		RL ID 9.2.1.53		–	
>PDSCH Code Mapping	C-DSCH		9.2.2.25		–	
>Power Offset Information		14			–	
>>PO1	M		Power Offset 9.2.2.29	Power offset for the TFCI bits	–	
>>PO2	M		Power Offset 9.2.2.29	Power offset for the TPC bits	–	
>>PO3	M		Power Offset 9.2.2.29	Power offset for the pilot bits	–	
>FDD TPC DL Step Size	M		9.2.2.16		–	
>Limited Power Increase	M		9.2.2.18A		–	
>Inner Loop DL PC Status	M		9.2.2.18B		–	
DCH Information	M		DCH FDD Information 9.2.2.4D		YES	reject
DSCH Information	O		DSCH FDD Information 9.2.2.13B		YES	reject

TFCI2 bearer information		0..10..4			YES	ignore
>ToAWS	M		9.2.1.61		-	
>ToAWE	M		9.2.1.60		-	
RL Information		1..<maxno ofRLs>+1 to <maxneof RLs>			EACH	notify
>RL ID	M		9.2.1.53		-	
>C-ID	M		9.2.1.9		-	
>First RLS Indicator	M		9.2.2.16A		-	
>Frame Offset	M		9.2.1.31		-	
>Chip Offset	M		9.2.2.2		-	
>Propagation Delay	O		9.2.2.35		-	
>Diversity Control Field	C- NotFirstRL		9.2.1.25		-	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		-	
>Initial DL tTransmission Power	M		DL Power 9.2.1.21	Initial power on DPCH	-	
>Maximum DL pPower	M		DL Power 9.2.1.21	Maximum allowed power on DPCH	-	
>Minimum DL pPower	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	-	
>SSDT Cell Identity	O		9.2.2.44		-	
>Transmit Diversity Indicator	C- Diversity mode		9.2.2.53		-	
>SSDT Cell Identity fFor EDSCHPC	C- EDSCHPC		9.2.2.44A		YES	ignore
>RL sSpecific DCH Information	O		9.2.1.XXX5 3G		YES	ignore
->Delayed Activation	O		9.2.1.24C		YES	reject
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject
Active Pattern Sequence Information	O		9.2.2.A		YES	reject
DSCH Common Information	O		DSCH FDD Common Information 9.2.2.13D		YES	ignore
DL Power Balancing Information	O		9.2.2.12B		YES	ignore
HS-DSCH Information	O		HS-DSCH FDD Information 9.2.2.18D		YES	reject
HS-DSCH-RNTI	O		INTEGER 9.2.1.31J		YES	reject
HS-PDSCH RL ID	C- InfoHSDSCH		RL ID 9.2.1.53		YES	reject

Condition	Explanation
CodeLen	The IE shall be present if <i>Min UL Channelisation Code Length</i> IE equals to 4.
NotFirstRL	The IE shall be present if the RL is not the first one in the <i>RL Information</i> IE.
DSCH	The IE shall be present if the <i>DSCH Information</i> IE is present.
SlotFormat	The IE shall be present if the <i>DL DPCH Slot Format</i> IE is equal to any of the values from 12 to 16.
Diversity mode	The IE shall be present if <i>Diversity Mode</i> IE in <i>UL DPCH Information</i> IE is not set to "none".
EDSCHPC	The IE shall be present if <i>Enhanced DSCH PC</i> IE is present in the <i>DSCH Common Information</i> IE.
InfoHSDSCH	The IE shall be present if <i>HS-DSCH FDD Information</i> IE is present as well.

Range b Bound	Explanation
maxnoofRLs MaxnoofRLs	Maximum number of RLs for one UE.

9.1.36.2 TDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		YES	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		YES	
UL CCTrCH Information		0..<maxno CCTrCH> 0 to <maxno CCTrCH>			EACH	notify
>CCTrCH ID	M		9.2.3.3		-	
>TFCS	M		9.2.1.58		-	
>TFCI Coding	M		9.2.3.22		-	
>Puncture Limit	M		9.2.1.50		-	
>UL SIR Target	O		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD; not applicable for 3.84Mcps TDD	YES	reject
>UL DPCH Information		0..10..4		Applicable to For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>UL Timeslot Information	M		9.2.3.26C		-	
>UL DPCH Information LCR		0..10..4		Applicable to For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>UL Timeslot Information LCR	M		9.2.3.26E		-	
>UL SIR Target	O		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
DL CCTrCH Information		0..<maxno CCTrCH> 0 to <maxno CCTrCH>			EACH	notify
>CCTrCH ID	M		9.2.3.3		-	
>TFCS	M		9.2.1.58		-	
>TFCI Coding	M		9.2.3.22		-	
>Puncture Limit	M		9.2.1.50		-	
>TDD TPC DL Step Size	M		9.2.3.21		-	
>TPC CCTrCH List		0..<maxno CCTrCH> 0 to <maxno CCTrCH>		List of uplink CCTrCH which provide TPC	-	

		CTrCH>				
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
>DL DPCH information		0..10..4		Applicable to For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH information LCR		0..10..4		Applicable to For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.4O		–	
>>TSTD Indicator	M		9.2.1.64		–	
>CCTrCH Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore
DCH Information	O		DCH TDD Information 9.2.3.4C		YES	reject
DSCH Information	O		DSCH TDD Information 9.2.3.5A		YES	reject
USCH Information	O		9.2.3.28		YES	reject
RL Information		14			YES	reject
>RL ID	M		9.2.1.53		–	
>C-ID	M		9.2.1.9		–	
>Frame Offset	M		9.2.1.31		–	
>Special Burst Scheduling	M		9.2.3.18A		–	
>Initial DL Transmission Power	M		DL Power 9.2.1.21	Initial power on DPCH	–	
>Maximum DL Power	M		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>DL Time Slot ISCP Info	O		9.2.3.4F	Applicable to For 3.84Mcps TDD only	–	
>DL Time Slot ISCP Info LCR	O		9.2.3.40A	Applicable to For 1.28Mcps TDD only	YES	reject
>RL sSpecific DCH Information	O		9.2.1.XXX5 3G		YES	ignore
—>Delayed Activation	O		9.2.1.24C		YES	reject
HS-DSCH Information	O		HS-DSCH TDD Information 9.2.3.5F		YES	reject
HS-DSCH-RNTI	O		INTEGER 9.2.1.31J		YES	reject
HS-PDSCH RL ID	C- InfoHSDS CH		RL ID 9.2.1.53		YES	reject

Range bBound	Explanation
<i>maxnoCCTrCH</i> <i>MaxnoCCTrCH</i>	Number of CCTrCHs for one UE.

9.1.37 RADIO LINK SETUP RESPONSE

9.1.37.1 FDD message

IE/Group Name	Presence	Range	IE #Type and #Reference	Semantics #Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value “All_CRNCCC” shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value “All_NBCC” shall not be used.	YES	ignore
Communication Control Port ID	M		9.2.1.15		YES	ignore
RL Information Response		<i>1..<maxno ofRLs>+ to <maxno ofRLs></i>			EACH	ignore
>RL ID	M		9.2.1.53		–	
>RL Set ID	M		9.2.2.39		–	
>Received #Total #Wide #Band #Power	M		9.2.2.39A		–	
>Diversity Indication	C-NotFirstRL		9.2.1.26		–	
>CHOICE #Diversity Indication	M				–	
>>Combining					–	
>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	–	
>>Non Combining or First RL					–	
>>>DCH Information Response	M		9.2.1.20C		–	
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>SSDT Support Indicator	M		9.2.2.46		–	
—>DL Power Balancing Activation Indicator	O		9.2.2.12C		YES	ignore
>HS-DSCH Information Response	O		HS-DSCH FDD Information Response 9.2.2.18E		YES	ignore
TFCI2 Bearer Information Response	O		9.2.2.49A		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Condition	Explanation
NotFirstRL	The IE shall be present if the RL is not the first one in the <i>RL Information Response</i> IE.

Range bBound	Explanation
maxnoofRLs MaxnoofRLs	Maximum number of RLs for one UE.

9.1.37.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	ignore
Communication Control Port ID	M		9.2.1.15		YES	ignore
RL Information Response		<u>0..10..4</u>		Mandatory F for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD_only	YES	ignore
>RL ID	M		9.2.1.53		–	
>UL Time Slot ISCP Info	M		9.2.3.26D		–	
>UL PhysCH SF Variation	M		9.2.3.26B		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.28		YES	ignore
>HS-DSCH Information Response	O		HS-DSCH TDD Information Response 9.2.3.5G		YES	ignore
RL Information Response LCR		<u>0..10..4</u>		Mandatory F for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD_only	YES	ignore
>RL ID	M		9.2.1.53		–	
>UL Time Slot ISCP Info LCR	M		9.2.3.26F		–	
>UL PhysCH SF Variation	M		9.2.3.26B		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.28		YES	ignore
>HS-DSCH Information Response	O		HS-DSCH TDD Information Response 9.2.3.5G		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.38 RADIO LINK SETUP FAILURE

9.1.38.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	C-Success		9.2.1.48	The reserved value "All_NBCC" shall not be used	YES	ignore
Communication Control Port ID	O		9.2.1.15		YES	ignore
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		–	
>RL sSpecific					–	
>>Unsuccessful RL Information Response		1..<maxno ofRLs>1 to <maxno ofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>>Successful RL Information Response		0..<maxno ofRLs>0 to <maxno ofRLs–1>		Note: There will never be maxnoofRLs repetitions of this sequence.	EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>RL Set ID	M		9.2.2.39			
>>>Received tTotal wWide bBand pPower	M		9.2.2.39A		–	
>>>Diversity Indication	C-NotFirstRL		9.2.1.26		–	
>>>CHOICE Diversity Indication	M				–	
>>>>Combining					–	
>>>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	–	
>>>>>Non Combining or First RL					–	
>>>>>DCH Information Response	M		9.2.1.20C		–	
>>>DSCH Information Response	O		9.2.1.27A		YES	ignore
>>>TFCI2 Bearer Information Response	O		9.2.2.49A		–	
>>>SSDT Support Indicator	M		9.2.2.46		–	

<>>>DL Power Balancing Activation Indicator	O		9.2.2.12C		YES	ignore
>>>HS-DSCH Information Response	O		HS-DSCH FDD Information Response 9.2.2.18E		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Condition	Explanation
Success	The IE shall be present if at least one of the radio links has been successfully set up.
NotFirstRL	The IE shall be present if the RL is not the first one in the Successful RL Information Response IE.

Range bBound	Explanation
maxnoofRLsMaxnoofRLs	Maximum number of RLs for one UE.

9.1.38.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		-	
CHOICE Cause Level	M				YES	ignore
>General					-	
>>Cause	M		9.2.1.6		-	
>RL sSpecific					-	
>>Unsuccessful RL Information Response		14			YES	ignore
>>>RL ID	M		9.2.1.53		-	
>>>Cause	M		9.2.1.6		-	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.39 RADIO LINK ADDITION REQUEST

9.1.39.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
Compressed Mode Deactivation Flag	O		9.2.2.3A		YES	reject
RL Information		1..<maxno ofRLs-1>			EACH	notify
>RL ID	M		9.2.1.53		–	
>C-ID	M		9.2.1.9		–	
>Frame Offset	M		9.2.1.31		–	
>Chip Offset	M		9.2.2.2		–	
>Diversity Control_Field	M		9.2.1.25		–	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		–	
>Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	–	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>SSDT Cell Identity	O		9.2.2.44		–	
>Transmit Diversity Indicator	O		9.2.2.53		–	
>DL Reference Power	O		DL power 9.2.1.21	Power on DPCH	YES	ignore
>RL Specific DCH Information	O		9.2.1.XXX5 3G		YES	ignore
—>Delayed Activation	O		9.2.1.24C		YES	reject

Range Bound	Explanation
MmaxnofRLs	Maximum number of RLs for one UE

9.1.39.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All-NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCTrCH Information		<i>0..<maxno CCTrCH> 0 to <maxno CCTrCH></i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
>UL DPCH Information		<i>0..10..4</i>		Applicable to For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH Information LCR		<i>0..10..4</i>		Applicable to For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
DL CCTrCH Information		<i>0..<maxno CCTrCH> 0 to <maxno CCTrCH></i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
>DL DPCH information		<i>0..10..4</i>		Applicable to For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH information LCR		<i>0..10..4</i>		Applicable to For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.4O		–	
>CCTrCH Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore
RL Information		<i>14</i>			YES	reject
>RL ID	M		9.2.1.53		–	

>C-ID	M		9.2.1.9		–	
>Frame Offset	M		9.2.1.31		–	
>Diversity Control Field	M		9.2.1.25		–	
>Initial DL ϵ Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	–	
>Maximum DL ρ Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL ρ Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>DL Time Slot ISCP Info	O		9.2.3.4F	Applicable to Fdd-3.84Mcps TDD only	–	
>DL Time Slot ISCP Info LCR	O		9.2.3.40A	Applicable to Fdd-1.28Mcps TDD only	YES	reject
>RL ϵ Specific DCH Information	O		9.2.1.XXX5 3G		YES	ignore
—>Delayed Activation	O		9.2.1.24C		YES	reject

Range ρ Bound	Explanation
$\max_{noCCTrCH} \max_{noCCTrCH}$	Number of CCTrCH for one UE.

9.1.40 RADIO LINK ADDITION RESPONSE

9.1.40.1 FDD message

IE/Group Name	Presence	Range	IE ϵ Type and ρ Reference	Semantics ρ Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value “_All_CRNCCC” shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information Response		$1..<1..<\max_{noofRLs}-1>$			EACH	ignore
>RL ID	M		9.2.1.53		–	
>RL Set ID	M		9.2.2.39		–	
>Received ϵ Total ρ Wide ρ Band ρ Power	M		9.2.2.39A		–	
>Diversity Indication	M		9.2.1.26		–	
>CHOICE Diversity Indication	M				–	
>>Combining					–	
>>>RL ID	M		9.2.1.53	Reference RL	–	
>>Non ϵ Combining					–	
>>>DCH Information Response	M		9.2.1.20C		–	
>SSDT ϵ Support ρ Indicator	M		9.2.2.46		–	
—>DL Power Balancing Activation Indicator	O		9.2.2.12C		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range b Bound	Explanation
<i>M</i> _{maxnoofRLs}	Maximum number of RLs for one UE

9.1.40.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62			
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62			
RL Information Response		0..10..4		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD only	YES	ignore
>RL ID	M		9.2.1.53		-	
>UL Time Slot ISCP Info	M		9.2.3.26D		-	
>UL PhysCH SF Variation	M		9.2.3.26B		-	
>DCH Information		0..10..4			-	
>>Diversity Indication	M		9.2.1.26			
>>CHOICE Diversity Indication	M				-	
>>>Combining				In TDD it indicates whether the old Transport Bearer shall be reused or not	-	
>>>>RL ID	M		9.2.1.53	Reference RL	-	
>>>>>Non Combining					-	
>>>>DCH Information Response	M		9.2.1.20C		-	
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore
RL Information Response LCR		0..10..4		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD only	YES	ignore
>RL ID	M		9.2.1.53		-	
>UL Time Slot ISCP Info LCR	M		9.2.3.26F		-	
>UL PhysCH SF Variation	M		9.2.3.26B		-	
>DCH Information		0..10..4			-	
>>Diversity Indication	M		9.2.1.26			
>>CHOICE Diversity indication	M				-	
>>>Combining				In TDD it indicates whether the old Transport Bearer shall be reused or not	-	
>>>>RL ID	M		9.2.1.53	Reference RL	-	
>>>>>Non Combining					-	

>>>>DCH Information Response	M		9.2.1.20C		-	
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29		YES	ignore

9.1.41 RADIO LINK ADDITION FAILURE

9.1.41.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		-	
CHOICE Cause Level	M				YES	ignore
>General					-	
>>Cause	M		9.2.1.6		-	
>RL sSpecific					-	
>>Unsuccessful RL Information Response		1..<1..<maxnoofRLs-1>			EACH	ignore
>>>RL ID	M		9.2.1.53		-	
>>>Cause	M		9.2.1.6		-	
>>Successful RL Information Response		0..<0..<maxnoofRLs-2>			EACH	ignore
>>>RL ID	M		9.2.1.53		-	
>>>RL Set ID	M		9.2.2.39			
>>> Received Total Wide Band Power	M		9.2.2.39A		-	
>>>Diversity Indication	M		9.2.1.26		-	
>>>CHOICE Diversity Indication	M				-	
>>>>Combining					-	
>>>>>RL ID	M		9.2.1.53	Reference RL	-	
>>>>Non Combining					-	
>>>>>DCH Information Response	M		9.2.1.20C		-	
>>>SSDT Support Indicator	M		9.2.2.46		-	
>>>DL Power Balancing Activation Indicator	O		9.2.2.12C		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
MmaxnoofRLs	Maximum number of RLs for one UE

9.1.41.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		–	
>RL sSpecific					–	
>>Unsuccessful RL Information Response		14			YES	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.42 RADIO LINK RECONFIGURATION PREPARE

9.1.42.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL DPCH Information		0..1			YES	reject
>UL Scrambling eCode	O		9.2.2.59		–	
>UL SIR Target	O		UL SIR 9.2.1.67A		–	
>Min UL Channelisation Code Length	O		9.2.2.22		–	
>Max Number of UL DPDCHs	C-CodeLen		9.2.2.21		–	
>Puncture Limit	O		9.2.1.50	For UL	–	
>TFCS	O		9.2.1.58		–	
>UL DPCCH Slot Format	O		9.2.2.57		–	
>Diversity mMode	O		9.2.2.9		–	
>SSDT Cell Identity Length	O		9.2.2.45		–	
>S-Field Length	O		9.2.2.40		–	
DL DPCH Information		0..1			YES	reject
>TFCS	O		9.2.1.58		–	
>DL DPCH Slot Format	O		9.2.2.10		–	
>TFCI Signalling Mode	O		9.2.2.50		–	
>TFCI pPresence	C-Slot Format		9.2.1.57		–	
>Multiplexing Position	O		9.2.2.23		–	
>PDSCH eCode mMapping	O		9.2.2.25		–	
>PDSCH RL ID	O		RL ID 9.2.1.53		–	
>Limited Power Increase	O		9.2.2.18A		–	
DCHs tTo Modify	O		DCHs FDD tTo Modify 9.2.2.4E		YES	reject
DCHs tTo Add	O		DCH FDD Information 9.2.2.4D		YES	reject
DCHs tTo Delete		0..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
DSCH tTo mModify		0..<maxno ofDSCHs>			YESEACH	reject
>DSCH ID	M		9.2.1.27		–	
>Transport Format Set	O		9.2.1.59	For the DL.	–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>Frame Handling Priority	O		9.2.1.30		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	

>Transport Bearer Request – Indicator	M		9.2.1.62A		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
DSCH T o aAdd	O		DSCH FDD Information 9.2.2.13B		YES	reject
DSCH To Delete		0..<maxno ofDSCHs>			YESEACH	reject
>DSCH ID	M		9.2.1.27		–	
TFCI2 bBearer specific iInformation		0..10..1			YES	reject
>CHOICE - TFCI2 bBearer aAction	M				–	
>>Add or modify					–	
>>>ToAWS	M		9.2.1.61		–	
>>>ToAWE	M		9.2.1.60		–	
>>> TFCI2 Bearer Request Indicator	O		9.2.1.56C		YES	reject
>>Delete			NULL		–	
RL Information		0..<maxno ofRLs>			EACH	reject
>RL ID	M		9.2.1.53		–	
>DL Code Information	O		FDD DL Code Information 9.2.2.14A		–	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>SSDT Indication	O		9.2.2.47		–	
>SSDT Cell Identity	C– SSDTIndO N		9.2.2.44		–	
>Transmit Diversity Indicator	C– Diversity mode		9.2.2.53		–	
>SSDT Cell Identity f or EDSCHPC	C- EDSCHPC		9.2.2.44A		YES	ignore
>DL Reference Power	O		DL Power 9.2.1.21	Power on DPCH	YES	ignore
>RL sSpecific DCH Information	O		9.2.1.XXX5 3G		YES	ignore
>DL DPCH Timing Adjustment	O		9.2.1.26A	Required RL Timing Adjustment	YES	reject
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject
DSCH Common Information	O		DSCH FDD Common Information 9.2.2.13D		YES	ignore

Signalling Bearer Request Indicator	O		9.2.1.55A		YES	reject
HS-DSCH Information Element Modify	O		9.2.1.531H		YES	reject
HS-DSCH Information Element Add	O		HS-DSCH FDD Information 9.2.2.18D		YES	reject
HS-DSCH Information Element Delete		0..<MO..<maxNoofMACdFlows>			GLOBAL	reject
>HS-DSCH MAC-D Flow ID	M		9.2.1.31I		—	
HS-DSCH-RNTI	O		9.2.1.31J		YES	reject
HS-PDSCH RL ID	O		RL ID 9.2.1.53		YES	reject

Condition	Explanation
SSDTIndON	The IE shall be present if the <i>SSDT Indication</i> IE is set to "SSDT Active in the UE".
CodeLen	The IE shall be present if the <i>Min UL Channelisation Code Length</i> IE is equal to 4.
SlotFormat	The IE shall be present if the <i>DL DPCH Slot Format</i> IE is equal to any of the values from 12 to 16.
Diversity mode	The IE shall be present if the <i>Diversity Mode</i> IE is present in the <i>UL DPCH Information</i> IE and is not set to "none".
EDSCHPC	The IE shall be present if the <i>Enhanced DSCH PC</i> IE is present in the <i>DSCH Common Information</i> IE.

Range Bound	Explanation
<i>MmaxnoofDCHs</i>	Maximum number of DCHs for a UE.
<i>MmaxnoofDSCHs</i>	Maximum number of DSCHs for a UE.
<i>MmaxnoofRLs</i>	Maximum number of RLs for a UE.
<i>MmaxnoofMACdFlows</i>	Maximum number of MAC-d Flows

9.1.42.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL CCTrCH #To Add		<i>0..<maxno of CCTrCHs></i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
>UL SIR Target	O		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD; not applicable for 3.84Mcps TDD	YES	reject
>UL DPCH Information		0..1		Applicable to For 3.84Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH Information LCR		0..1		Applicable to For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
>UL SIR Target	O		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD	YES	reject
UL CCTrCH #To Modify		<i>0..<maxno of CCTrCHs></i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>TFCI Coding	O		9.2.3.22		–	
>Puncture Limit	O		9.2.1.50		–	
>UL SIR Target	O		UL SIR 9.2.1.67A	Applicable to For 1.28Mcps TDD only	YES	reject

>UL DPCH ¶To aAdd		0..1		Applicable to For 3.84Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
>UL DPCH ¶To mModify		0..1			YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD DPCH Offset	O		9.2.3.19A		–	
>>UL Timeslot Information		0..<maxno of ULts>0 to <maxno of ULts>		Applicable to For 3.84Mcps TDD only	–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift aAnd Burst Type	O		9.2.3.7		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>UL Code Information		0..<maxno of DPCHs>0 to <maxno of DPCHs>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code	O		9.2.3.19		–	
>>UL Timeslot Information LCR		0..<maxno of ULtsLCR>0 to <Maxno of ULtsLCR>		Applicable to For 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		–	
>>>Midamble sShift LCR	O		9.2.3.7A			
>>>TFCI Presence	O		9.2.1.57		–	
>>>UL Code Information LCR		0..<maxno of DPCHLCR>0 to <maxno of DPCHLCR>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code LCR	O		9.2.3.19a		–	
>UL DPCH ¶To dDelete		0..<maxno of DPCHs> <maxno of DPCHs>			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		–	
>UL DPCH ¶To aAdd LCR		0..1		Applicable to For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
UL CCTrCH ¶To Delete		0..<maxno			GLOBAL	reject

		<i>ofCCTrCH s> <maxnoof CCTrCHs ></i>				
>CCTrCH ID	M		9.2.3.3		–	
DL CCTrCH to Add		<i>0..<maxno ofCCTrCH s>0.. <maxnoof CCTrCHs ></i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture_Limit	M		9.2.1.50		–	
>TPC CCTrCH List		<i>0..<maxno ofCCTrCH s>0 to <maxnoC CTrCHs></i>		List of uplink CCTrCH which provide TPC	–	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
>DL DPCH Information		<i>0..1</i>		Applicable to For 3.84Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH Information LCR		<i>0..1</i>		Applicable to For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.4O		–	
>CCTrCH Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore

DL CCTrCH ϵTo Modify		<i>0..<maxno of CCTrCHs>0..<maxno of CCTrCHs></i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3.		-	
>TFCS	O		9.2.1.58		-	
>TFCI Coding	O		9.2.3.22		-	
>Puncture Limit	O		9.2.1.50		-	
>TPC CCTrCH List		<i>0..<maxno of CCTrCHs>0 to <maxno of CCTrCHs></i>		List of uplink CCTrCH which provide TPC	-	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		-	
>DL DPCH ϵTo aAdd		<i>0..1</i>		Applicable to Fdd 3.84Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>DL Timeslot Information	M		9.2.3.4E		-	
>DL DPCH ϵTo mModify		<i>0..1</i>			YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD DPCH Offset	O		9.2.3.19A		-	
>>DL Timeslot Information		<i>0..<maxno of DLts>0..<maxno of DLts></i>		Applicable to Fdd 3.84Mcps TDD only	-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift aAnd Burst Type	O		9.2.3.7		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>DL Code Information		<i>0..<maxno of DPCHs>0..<maxno of DPCHs></i>			-	
>>>>DPCH ID	M		9.2.3.5		-	
>>>>TDD Channelisation Code	O		9.2.3.19		-	
>>DL Timeslot Information LCR		<i>0..<maxno of DLtsLCR>0..<Maxno of DLtsLCR></i>		Applicable to Fdd 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble sShift LCR	O		9.2.3.7A		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>DL Code Information LCR		<i>0..<maxno of DPCHsLCR>0..<maxno of DPCHsLCR></i>			-	
>>>>DPCH ID	M		9.2.3.5		-	
>>>>TDD	O		9.2.3.19a		-	

Channelisation Code LCR						
>DL DPCH † To d Delete		<i>0..<maxno ofDPCHs> 0.. <maxnoof DPCHs></i>			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		–	
>DL DPCH † To a Add LCR		<i>0..1</i>		Applicable to Fdd-1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.40		–	
DL CCTrCH † To Delete		<i>0..<maxno ofCCTrCH s>0.. <maxnoof CCTrCHs ></i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
DCHs † To Modify	O		DCHs TDD † To Modify 9.2.3.4D		YES	reject
DCHs † To Add	O		DCH TDD Information 9.2.3.4C		YES	reject
DCHs † To Delete		<i>0..<maxno ofDCHs></i>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
DSCH Information † To m Modify		<i>0..<maxno ofDSCHs> 0.. <Maxnoof DSCHs></i>			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
>CCTrCH ID	O		9.2.3.3	DL CCTrCH in which the DSCH is mapped	–	
>Transport Format Set	O		9.2.1.59		–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>Frame Handling Priority	O		9.2.1.30		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	
>Transport Bearer Request – Indicator	M		9.2.1.62A		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
DSCH Information † To a Add	O		DSCH TDD Information 9.2.3.5A		YES	reject

DSCH Information ToDelete		<i>0..<maxno of DSCHs> 0.. <Maxno of DSCHs></i>			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
USCH Information Modify		<i>0..<maxno of USCHs> 0.. <Maxno of USCHs></i>			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
>Transport Format Set	O		9.2.1.59		–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>CCTrCH ID	O		9.2.3.2	UL CCTrCH in which the USCH is mapped	–	
>Transport Bearer Request – Indicator	M		9.2.1.62A		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
USCH Information Add	O		USCH Information 9.2.3.28		YES	reject
USCH Information Delete		<i>0..<maxno of USCHs> 0.. <Maxno of USCHs></i>			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
RL Information		<i>0..1</i>			YES	reject
>RL ID	M		9.2.1.53		–	
>Maximum Downlink Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum Downlink Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore
>RL sSpecific DCH Information	O		9.2.1.XXX5 3G		YES	ignore
Signalling Bearer Request Indicator	O		9.2.1.55A		YES	reject
HS-DSCH Information Modify	O		9.2.1.31H		YES	reject
HS-DSCH Information Add	O		HS-DSCH TDD Information 9.2.3.x25F		YES	reject
HS-DSCH Information Delete		<i>0..<maxno of MACdFlows>0..<MaxNoOfMA</i>			GLOBAL	reject

		CdFlows>				
>HS-DSCH MAC-D flow ID	M		9.2.1.31I		-	
HS-DSCH-RNTI	O		9.2.1.31J		YES	reject
HS-PDSCH RL ID	O		RL ID 9.2.1.53		YES	reject

Range Bound	Explanation
<i>M_{maxnoofDCHs}</i>	Maximum number of DCHs for a UE.
<i>M_{maxnoofCCTrCHs}</i>	Maximum number of CCTrCHs for a UE.
<i>M_{maxnoofDPCHs}</i>	Maximum number of DPCHs in one CCTrCH for 3.84Mcps TDD.
<i>M_{maxnoOfDPCHsLCRs}</i>	Maximum number of DPCHs in one CCTrCH for 1.28Mcps TDD.
<i>M_{maxnoofDSCHs}</i>	Maximum number of DSCHs for one UE
<i>M_{maxnoofUSCHs}</i>	Maximum number of USCHs for one UE
<i>M_{maxnoofDLts}</i>	Maximum number of Downlink time slots per Radio Link for 3.84Mcps TDD.
<i>M_{maxnoofDLtsLCR}</i>	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.
<i>M_{maxnoofULts}</i>	Maximum number of Uplink time slots per Radio Link for 3.84Mcps TDD.
<i>M_{maxnoofULtsLCR}</i>	Maximum number of Uplink time slots per Radio Link for 1.28Mcps TDD.
<i>M_{maxNoOfMACdFlows}</i>	Maximum number of HS-DSCH MAC-d flows

9.1.43 RADIO LINK RECONFIGURATION READY

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information Response		<i>0..<maxno ofRLs></i>		Only one RL information response group for one group of combined RLs shall be present	EACH	ignore
>RL ID	M		9.2.1.53		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29	TDD only	YES	ignore
>TFCI2 Bearer Information Response	O		9.2.2.49A	FDD only	–	
>DL Power Balancing Updated Indicator	O		9.2.2.12D		YES	ignore
>HS-DSCH FDD Information Response	O		9.2.2.18E		YES	ignore
>HS-DSCH TDD Information Response	O		9.2.3.18E.5 G		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore
Target Communication Control Port ID	O		9.2.1.15		YES	ignore

Range Bound	Explanation
<i>MmaxnoofRLs</i>	Maximum number of RLs for a UE.

9.1.44 RADIO LINK RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		YES	ignore
>RL sSpecific					–	
>>RLs Causing Reconfiguration Failure		0..<maxno ofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
$M_{maxnoofRLs}$	Maximum number of RLs for a UE.

9.1.45 RADIO LINK RECONFIGURATION COMMIT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CFN	M		9.2.1.7		YES	ignore
Active Pattern Sequence Information	O		9.2.2.A		YES	ignore

9.1.46 RADIO LINK RECONFIGURATION CANCEL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	

9.1.47 RADIO LINK RECONFIGURATION REQUEST

9.1.47.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL DPCH Information		0..1			YES	reject
>TFCS	O		9.2.1.58	For the UL.	–	
DL DPCH Information		0..1			YES	reject
>TFCS	O		9.2.1.58	For the DL.	–	
>TFCI Signalling Mode	O		9.2.2.50		–	
>Limited Power Increase	O		9.2.2.18A		–	
DCHs \dagger To Modify	O		DCHs FDD \dagger To Modify 9.2.2.4E		YES	reject
DCHs \dagger To Add	O		DCH FDD Information 9.2.2.4D		YES	reject
DCHs \daggerTo Delete		0..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
Radio Link Information		0..<maxno ofRLs>			EACH	reject
>RL ID	M		9.2.1.53		–	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>DL Code Information	C-SF/2		FDD DL Code Information 9.2.2.14A		–	
>DL Reference Power	O		DL Power 9.2.1.21	Power on DPCH	YES	ignore
>RL sSpecific DCH Information	O		9.2.1.XXX5 3G		YES	ignore
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject
Signalling Bearer Request Indicator	O		9.2.1.55A		YES	reject

Range Bound	Explanation
$M_{maxnoofDCHs}$	Maximum number of DCHs for a UE.
$M_{maxnoofRLs}$	Maximum number of RLs for a UE.

Condition	Explanation
SF/2	The IE shall be present if the <i>Transmission Gap Pattern Sequence Information</i> IE is included and the indicated Downlink Compressed Mode method for at least one of the included Transmission Gap Pattern Sequence is set to "SF/2".

9.1.47.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		Y	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		Y	
UL CCH TrCH τTo mModify		0..<maxno of CCH TrCH s>			EACH	notify
>CCH TrCH ID	M		9.2.3.3		-	
>TFCS	O		9.2.1.58		-	
>Puncture Limit	O		9.2.1.50		-	
UL CCH TrCH τTo dDelete		0..<maxno of CCH TrCH s>			EACH	notify
>CCH TrCH ID	M		9.2.3.3		-	
DL CCH TrCH τTo mModify		0..<maxno of CCH TrCH s>			EACH	notify
>CCH TrCH ID	M		9.2.3.3		-	
>TFCS	O		9.2.1.58		-	
>Puncture Limit	O		9.2.1.50		-	
DL CCH TrCH τTo dDelete		0..<maxno of CCH TrCH s>			EACH	notify
>CCH TrCH ID	M		9.2.3.3		-	
DCHs τ To Modify	O		DCHs TDD τ To Modify 9.2.3.4D		YES	reject
DCHs τ To Add	O		DCH TDD Information 9.2.3.4C		YES	reject
DCHs τTo Delete		0..<maxno of DSCHs>			GLOBAL	reject
>DCH ID	M		9.2.1.20		-	
RL Information		0..1			YES	reject
>RL ID	M		9.2.1.53		-	
>Maximum Downlink Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	-	
>Minimum Downlink Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	-	
>RL sSpecific DCH Information	O		9.2.1.XXX5 3G		YES	ignore
Signalling Bearer Request Indicator	O		9.2.1.55A		YES	reject

Range bBound	Explanation
MmaxnoofCCH TrCHs	Maximum number of CCH TrCHs for a UE.

9.1.48 RADIO LINK RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information Response		0..<maxno ofRLs>		Only one RL information response group for one group of combined RLs shall be present	EACH	ignore
>RL ID	M		9.2.1.53		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DL Power Balancing Updated Indicator	O		9.2.2.12D		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore
Target Communication Control Port ID	O		9.2.1.15		YES	ignore

Range bBound	Explanation
MmaxnoofRLs	Maximum number of RLs for a UE.

9.1.49 RADIO LINK DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	reject
CRNC Communication Context ID	M		9.2.1.18		YES	reject
Transaction ID	M		9.2.1.62		–	
RL Information		1..<maxno ofRLs>			EACH	notify
>RL ID	M		9.2.1.53		–	

Range bBound	Explanation
MmaxnoofRLs	Maximum number of radio links for one UE

9.1.50 RADIO LINK DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		YES	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		YES	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.51 DL POWER CONTROL REQUEST [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		YES	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		YES	
Power Adjustment Type	M		9.2.2.27		YES	ignore
DL Reference Power	C-Common		DL power 9.2.1.21	Power on DPCH	YES	ignore
Inner Loop DL PC Status	O		9.2.2.18B		YES	ignore
DL Reference Power Information	C-Individual	1..<maxno ofRLs>1..<maxno ofRLs>			GLOBAL E-ACH	ignore
>RL ID	M		9.2.1.53		-	
>DL Reference Power	M		DL power 9.2.1.21	Power on DPCH	-	
Max Adjustment Step	C-CommonOrIndividual		9.2.2.20		YES	ignore
Adjustment Period	C-CommonOrIndividual		9.2.2.B		YES	ignore
Adjustment Ratio	C-CommonOrIndividual		9.2.2.C		YES	ignore

Condition	Explanation
Common	The IE shall be present if the 'Adjustment Type IE is equal to "Common".
Individual	The IE shall be present if the Adjustment Type IE is equal to "Individual".
CommonOrIndividual	The IE shall be present if the Adjustment Type IE is equal to "Common" or "Individual".

Range Bound	Explanation
maxno ofRLsMaxno ofRLs	Maximum number of Radio Links for a UE

9.1.52 DEDICATED MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used when the Report characteristics type is set to "On-Demand".	YES	reject
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	reject
Dedicated Measurement Object Type	M		9.2.1.22		YES	reject
CHOICE <i>Dedicated Measurement Object Type</i>	M				YES	reject
>>RL					–	
>>RL Information		<i>1..<maxno ofRLs>1..<maxnoofRLs></i>			EACH	reject
>>>RL ID	M		9.2.1.53		–	
>>>DPCH ID	O		9.2.3.5	TDD only	–	
>>>>PUSCH Information		<i>0..<maxno ofPUSCHs>0..<maxnoofPUSCHs></i>		TDD only	GLOBAL ACH	reject
>>>>PUSCH ID	M		9.2.3.12		–	
>>RLS				FDD only	–	
>>RL Set Information		<i>1..<maxno ofRLSets>1..<maxno ofRLSets></i>			–	
>>>RL Set ID	M		9.2.2.39		–	
>>ALL RL			NULL		–	
>>ALL RLS			NULL	FDD only	–	
Dedicated Measurement Type	M		9.2.1.23		YES	reject
Measurement Filter Coefficient	O		9.2.1.41		YES	reject
Report Characteristics	M		9.2.1.51		YES	reject
CFN <i>r</i> Reporting <i>i</i> ndicator	M		FN <i>r</i> Reporting <i>i</i> ndicator 9.2.1.29B		YES	reject
CFN	O		9.2.1.7		YES	reject

Range Bound	Explanation
<i>M</i> _{maxnoofRLs}	Maximum number of individual RL's a measurement can be started on-
<i>M</i> _{maxnoofPUSCHs}	Maximum number of PUSCHs per RL a measurement can be started on-
<i>M</i> _{maxnoofRLSets}	Maximum number of individual RL Sets a measurement can be started on-

9.1.53 DEDICATED MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
CRNC Communication Context ID	M		9.2.1.18		YES	ignore
Transaction ID	M		9.2.1.62		-	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE <i>Dedicated Measurement Object Type</i>	O			Dedicated Measurement Object Type the measurement was initiated with	YES	ignore
<i>>>RL or of ALL RL</i>					-	
>>RL Information		<i>1..<maxno ofRLs>1..<maxnoofRLs></i>			EACH	ignore
>>>RL ID	M		9.2.1.53		-	
>>>DPCH ID	O		9.2.3.5	TDD only	-	
>>>PUSCH Information		<i>0..<maxno ofPUSCHs></i>		TDD only	EACH	reject
>>>>PUSCH ID	M		9.2.3.12		-	
>>>Dedicated Measurement Value	M		9.2.1.24		-	
>>>CFN	O		9.2.1.7	Dedicated Measurement Time Reference	-	
>>>PUSCH Information		<i>0..<maxno ofPUSCHs></i>		TDD only	GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		-	
<i>>>RLS or of ALL RLS</i>				FDD only	-	
>>RL Set Information		<i>1..<maxno ofRLSets>1..<maxno ofRLSets></i>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		-	
>>>Dedicated Measurement Value	M		9.2.1.24		-	
>>>CFN	O		9.2.1.7	Dedicated Measurement Time Reference	-	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
<i>M</i> _{maxnoofRLs}	Maximum number of individual RL's the measurement can be started on-
<i>M</i> _{maxnoofPUSCHs}	Maximum number of PUSCHs per RL a measurement can be started on-
<i>M</i> _{maxnoofRLSets}	Maximum number of individual RL Sets a measurement can be started on-

9.1.54 DEDICATED MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18		YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.55 DEDICATED MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE <i>Dedicated Measurement Object Type</i>	M			Dedicated Measurement Object Type the measurement was initiated with	YES	ignore
<i>>>RL or of ALL RL</i>					–	
>>RL Information		<i>1..<maxno ofRLs>1..<maxnoofRLs></i>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>DPCH ID	O		9.2.3.5	TDD only	–	
>>>PUSCH Information		<i>0..<maxno ofPUSCHs></i>		TDD only	EACH	reject
>>>>PUSCH ID	M		9.2.3.12		–	
>>>Dedicated Measurement Value Information	M		9.2.1.24A		–	
>>>PUSCH Information		<i>0..<maxno ofPUSCHs></i>		TDD only	GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		–	
<i>>>RLS or of ALL RLS</i>					–	
>>RL Set Information		<i>1..<maxno ofRLSets>1..<maxno ofRLSets></i>			EACH	ignore
>>>RL Set ID	M		9.2.1.39		–	
>>>Dedicated Measurement Value Information	M		9.2.1.24A		–	

Range Bound	Explanation
<i>M_{maxnoofRLs}</i>	Maximum number of individual RL's the measurement can be started on.
<i>M_{maxnoofPUSCHs}</i>	Maximum number of PUSCHs per RL a measurement can be started on.
<i>M_{maxnoofRLSets}</i>	Maximum number of individual RL Sets a measurement can be started on.

9.1.56 DEDICATED MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall be used if this value was used when initiating the measurement. Otherwise, the reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore

9.1.57 DEDICATED MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall be used if the Node B Communication Context ID was set to "All NBCC" when initiating the measurement. Otherwise, the reserved value "All CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore

9.1.58 RADIO LINK FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All-CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Reporting Object	M			Object for which the Failure shall be reported.	YES	ignore
>>RL					–	
>>RL Information		1 to <M1..<maximum of RLS>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>>RL Set				FDD only	–	
>>RL Set Information		1 to <M1..<maximum of RLS sets>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		–	
>>>Cause	M		9.2.1.6		–	
→>>CCTrCH				TDD only	–	
>>RL ID	M		9.2.1.53		–	
>>CCTrCH List		1 to <M1..<maximum of CCTrCHs>			EACH	ignore
>>>CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
>>>Cause	M		9.2.1.6		–	

Range Bound	Explanation
M _{maximum of RLS}	Maximum number of RLS for one UE.
M _{maximum of RL Sets}	Maximum number of RL Sets for one UE.
M _{maximum of CCTrCHs}	Maximum number of CCTrCHs for a UE.

9.1.59 RADIO LINK RESTORE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE Reporting Object	M			Object for which the Restoration shall be reported.	YES	ignore
>>RL					–	
>>Radio Link Information		1 to <M1..<maxnoofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>RL Set				FDD only	–	
>>RL Set Information		1 to <M1..<maxnoofRLSets>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		–	
→>>CCTrCH				TDD only	–	
>>RL ID	M		9.2.1.53		–	
>>CCTrCH List		1 to <M1..<maxnoofCCTrCHs>			EACH	ignore
>>>CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	

Range Bound	Explanation
<i>M</i> maxnoofRLs	Maximum number of RLs for one UE.
<i>M</i> maxnoofRLSets	Maximum number of RL Sets for one UE.
<i>M</i> maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.1.60 COMPRESSED MODE COMMAND [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B eCommunication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Active Pattern Sequence Information	M		9.2.2.A		YES	ignore

9.1.61 ERROR INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	O		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Node B Communication Context ID	O		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Cause	O		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.62 PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST

9.1.62.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
SFN	O		9.2.1.53A		YES	reject
HS-PDSCH and HS-SCCH Total Power	O		Maximum Transmission Power 9.2.1.40	Maximum transmission power to be allowed for HS-PDSCH and HS-SCCH codes	YES	reject

HS-PDSCH and HS-SCCH Scrambling Code	O		DL Scrambling Code 9.2.2.13	Scrambling code on which HS-PDSCH and HS-SCCH is transmitted. 0= Primary scrambling code of the cell 1...15 = Secondary scrambling code	YES	reject
HS-PDSCH FDD Code Information		0..1	9.2.2.18F		YES	reject
HS-SCCH FDD Code Information		0..1	9.2.2.*18G		YES	reject

9.1.62.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		==	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		==	
C-ID	M		9.2.1.9		YES	reject
SFN	O		9.2.1.53A		YES	reject
PDSCH Sets ¶To aAdd		0..<maxno of PDSCHSets>			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		==	
>PDSCH ¶To aAdd Information		0..1		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>DL Timeslot Information		1..<maxno of DLts>1..<maxno of DLts>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift aAnd Burst Type	M		9.2.3.7		-	
>>>TFCI Presence	M		9.2.1.57		-	
>>>DL Code Information		1..<maxno of PDSCHs>1..<maxno of PDSCHs>			-	
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>PDSCH ¶To aAdd Information LCR		0..1		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject

>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>DL Timeslot Information LCR		<i>1..<maxno ofDLtsLCR> ≥1.. <Maxnoof DLtsLCR></i>			GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble Shift LCR	M		9.2.3.7A		-	
>>>TFCI Presence	M		9.2.1.57		-	
>>>DL Code Information LCR		<i>1..<maxno ofPDSCHs> ≥1.. <maxnoOf PDSCH></i>			GLOBAL	reject
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
PDSCH Sets to Modify		<i>0..<maxno of PDSCHsets></i>			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		-	
>PDSCH to Modify Information		<i>0..1</i>		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD Physical Channel Offset	O		9.2.3.20		-	
>>DL Timeslot Information		<i>0..<maxno ofDLts>0.. <maxnoof DLts></i>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift and Burst Type	O		9.2.3.7		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>DL Code Information		<i>0..<maxno ofPDSCHs> ≥0.. <maxnoOf PDSCH></i>			-	
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>PDSCH to Modify Information LCR		<i>0..10..4</i>		Mandatory for 1.28 Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD Physical Channel Offset	O		9.2.3.20		-	

>>DL Timeslot Information LCR		<i>0..<maxno ofDLtsLCR> ≥0.. <Maxnoof DLtsLCR></i>			GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble Shift LCR	O		9.2.3.7A			
>>>TFCI Presence	O		9.2.1.57		-	
>>>DL Code Information LCR		<i>0..<maxno ofPDSCHs LCR> ≥0.. <maxnoOf PDSCHLCR></i>			GLOBAL	reject
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
PDSCH Sets to Delete		<i>0..<maxno of PDSCHsets></i>			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		-	
PUSCH Sets to Add		<i>0..<maxno of PUSCHsets></i>			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	
>PUSCH to Add Information		<i>0..1</i>		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>UL Timeslot Information		<i>1..<maxno ofULts> ≥1.. <maxnoof ULts></i>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift and Burst Type	M		9.2.3.7		-	
>>>TFCI Presence	M		9.2.1.57		-	
>>>UL Code Information		<i>1..<maxno ofPUSCHs> ≥1.. <maxnoOf PUSCH></i>			-	
>>>>PUSCH ID	M		9.2.3.12		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>PUSCH to Add Information LCR	⊖	<i>0..14</i>		Applicable to For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD Physical Channel Offset	M		9.2.3.20		-	

>>UL Timeslot Information LCR		<i>1..<maxno ofULtsLCR> ≥1.. <Maxnoof ULtsLCR></i>			GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble Shift LCR	M		9.2.3.7A			
>>>TFCI Presence	M		9.2.1.57		-	
>>>UL Code Information LCR		<i>1..<maxno ofPUSCHs LCR>1.. <maxnoOf PUSCHLCR></i>			GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
PUSCH Sets to Modify		<i>0..<maxno of PUSCHsets></i>			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	
>PUSCH to Modify Information		<i>0..1</i>		Applicable to For 3.84Mcps TDD only	YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD Physical Channel Offset	O		9.2.3.20		-	
>>UL Timeslot Information		<i>0..<maxno ofULts>0.. <maxnoof ULts></i>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift and Burst Type	O		9.2.3.7		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>UL Code Information		<i>0..<maxno ofPUSCHs>0.. <maxnoOf PUSCH></i>			-	
>>>>PUSCH ID	M		9.2.3.12		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>PUSCH to Modify Information LCR		<i>0..10..4</i>		Applicable to For 1.28Mcps TDD only	YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD Physical Channel Offset	O		9.2.3.20		-	
>>UL Timeslot Information LCR		<i>0..<maxno ofULtsLCR> ≥0.. <Maxnoof ULtsLCR></i>		Applicable to For 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble Shift LCR	O		9.2.3.7A			
>>>TFCI Presence	O		9.2.1.57		-	

>>>>UL Code Information LCR		0..<maxno of PUSCHs LCR>0..<maxnoOf PDSCHLCR>			GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
PUSCH Sets to Delete		0..<maxno of PUSCHsets>			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	
HS-PDSCH TDD Information		0..1			GLOBAL	reject
>DL Timeslot Information		0..<maxnoof DLts>		Applicable to For 3.84Mcps TDD only	-	
>>Time Slot	M		9.2.3.23		-	
>>Midamble Shift and Burst Type	M		9.2.3.7		-	
>DL Timeslot Information LCR		0..<maxnoof DLtsLCR>		Applicable to For 1.28Mcps TDD only	GLOBAL	reject
>>Time Slot LCR	M		9.2.3.24a		-	
>>Midamble Shift LCR	M		9.2.3.7A		-	
Add to HS-SCCH Resource Pool		0..1			GLOBAL	reject
>HS-SCCH Information		0..<maxnoof HSSCCHs>		Applicable to For 3.84Mcps TDD only	-	
>>HS-SCCH ID	M		9.2.3.18H		-	
>>Time Slot	M		9.2.3.23		-	
>>Midamble Shift and Burst Type	M		9.2.3.7		-	
>>TDD Channelisation Code	M		9.2.3.19		-	
>>Maximum HS-SCCH Power	M		DL Power 9.2.1.21		-	
>>HS-SICH Information		1			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift and Burst Type	M		9.2.3.7		-	
>>>TDD Channelisation Code	M		9.2.3.19		-	
>HS-SCCH Information LCR		0..<maxnoof HSSCCHs>		Applicable to For 1.28Mcps TDD only	GLOBAL	reject
>>HS-SCCH ID	M		9.2.3.18H		-	
>>Time Slot LCR	M		9.2.3.24a		-	
>>Midamble Shift LCR	M		9.2.3.7A		-	
>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
>>Maximum HS-SCCH Power	M		DL Power 9.2.1.21		-	
>>HS-SICH Information LCR		1			-	

>>>Time Slot LCR	M		9.2.3.24a		–	
>>>Midamble <i>s</i> Shift LCR	M		9.2.3.7A		–	
>>>TDD Channelisation Code LCR	M		9.2.3.19a		–	
Modify HS-SCCH Resource Pool		0..1			GLOBAL	reject
>HS-SCCH Information		0..<maxnoof HSSCCHs>		Applicable to For 3.84Mcps TDD only	–	
>>HS-SCCH ID	M		9.2.3.18H		–	
>>Time Slot	O		9.2.3.23		–	
>>Midamble Shift <i>a</i> And Burst Type	O		9.2.3.7		–	
>>TDD Channelisation Code	O		9.2.3.19		–	
>>Maximum HS-SCCH Power	O		DL Power 9.2.1.21		–	
>>HS-SICH Information		0..1			–	
>>>Time Slot	O		9.2.3.23		–	
>>>Midamble Shift <i>a</i> And Burst Type	O		9.2.3.7		–	
>>>TDD Channelisation Code	O		9.2.3.19		–	
>HS-SCCH Information LCR		0..<maxnoof HSSCCHs>		Applicable to For 1.28Mcps TDD only	GLOBAL	reject
>>HS-SCCH ID	M		9.2.3.18H		–	
>>Time Slot LCR	O		9.2.3.24a		–	
>>Midamble <i>s</i> Shift LCR	O		9.2.3.7A		–	
>>TDD Channelisation Code LCR	O		9.2.3.19a		–	
>>Maximum HS-SCCH Power	O		DL Power 9.2.1.21		–	
>>HS-SICH Information LCR		0..1			–	
>>>Time Slot LCR	O		9.2.3.24a		–	
>>Midamble <i>s</i> Shift LCR	O		9.2.3.7A		–	
>>>TDD Channelisation Code LCR	O		9.2.3.19a		–	
Delete from HS-SCCH Resource Pool		0..<maxno of HSSCCHs>			GLOBAL	reject
>HS-SCCH ID	M		9.2.3.18H		–	

Range <i>b</i> Bound	Explanation
<i>M</i> maxnoof-PDSCH-Sets	Maximum number of PDSCH Sets in a cell.
<i>M</i> maxnoof-PDSCHs	Maximum number of PDSCH in a cell for 3.84Mcps TDD only.
MaxnoOfPDSCHLCR	Maximum number of PDSCH in a cell for 1.28Mcps TDD only.
<i>M</i> maxnoof-PUSCH-Sets	Maximum number of PUSCH Sets in a cell.
<i>M</i> maxnoof-PUSCHs	Maximum number of PUSCH in a cell for 3.84Mcps TDD.
Maxnoof-PUSCHLCR	Maximum number of PUSCH in a cell for 1.28Mcps TDD.
<i>M</i> maxnoofDLts	Maximum number of Downlink time slots in a cell for 3.84Mcps TDD.
<i>M</i> maxnoofULts	Maximum number of Uplink time slots in a cell for 3.84Mcps TDD.
maxnoofULtsLCRMaxnoofULtsLCR	Maximum number of Uplink time slots in a cell for 1.28Mcps TDD
<i>M</i> maxnoofHSSCCHs	Maximum number of HS-SCCHs in a Cell

9.1.63 PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		==	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		==	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.64 PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		==	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		==	
CHOICE <i>eCause</i> <i>!Level</i>	M				YES	ignore
>General					-	
>>Cause	M		9.2.1.6		-	
>Set <i>Specific</i>				TDD Only	-	
>>Unsuccessful DL Shared Channel Set>>Unsuccessful DL Shared-channel set		0..<maxno ofPDSCH Sets>0..<maxnoofPDSCHSets>			EACH	ignore
>>>PDSCH Set ID	M		9.2.3.13		==	
>>>Cause	M		9.2.1.6		YES	ignore
>>Unsuccessful UL Shared Channel Set>>Unsuccessful UL Shared-channel set		0..<maxno ofPUSCH Sets>0..<maxnoofPUSCHSets>			EACH	ignore
>>>PUSCH Set ID	M		9.2.3.13		==	
>>>Cause	M		9.2.1.6		==	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range <i>bBound</i>	Explanation
<i>Mmaxnoof-PDSCH-Sets</i>	Maximum number of PDSCH Sets in a cell.
<i>Mmaxnoof-PUSCH-Sets</i>	Maximum number of PUSCH Sets in a cell.

9.1.65 RESET REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	

CHOICE <i>Reset Indicator</i>	M				YES	ignore
<i>>>Communication Context</i>					-	
>>>>Communication Context Information		1..<maxCommunicationContext>			EACH	reject
>>>CHOICE <i>Communication Context Type</i>	M				-	
>>>>CRNC <i>Communication Context</i>					-	
>>>>>CRNC <i>Communication Context ID</i>	M		9.2.1.18		-	
>>>>Node B <i>Communication Context</i>					-	
>>>>>Node B <i>Communication Context-ID</i>	M		9.2.1.48		-	
<i>>>Communication Control Port</i>					-	
>>>>Communication Control Port Information		1..<maxCCPinNodeB>			EACH	reject
>>>Communication <i>Control Port ID</i>	M		9.2.1.15		-	
<i>>>Node B</i>			NULL		-	

Range bBound	Explanation
<i>maxCommunicationContext</i>	Maximum number of eCommunication eContexts that can exist in the Node-B
<i>maxCCPinNodeB</i>	Maximum number of eCommunication eControl pPorts that can exist in the Node B

9.1.66 RESET RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.67 DL POWER TIMESLOT CONTROL REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All_NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
DL Time Slot ISCP Info	O		9.2.3.4F	Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD-only.	YES	ignore
DL Time Slot ISCP Info LCR	O		9.2.3.40A	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD-only.	YES	ignore
Primary CCPCH RSCP	O		9.2.3.11A		YES	ignore

9.1.68 RADIO LINK PREEMPTION REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18		YES	ignore
RL Information		0..<maxno ofRLs>			EACH	ignore
>RL ID	M		9.2.1.53		–	

Range Bound	Explanation
maxnoofRLs	Maximum number of radio links for one UE

9.1.69 INFORMATION EXCHANGE INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Information Exchange ID	M		9.2.1.36C		YES	reject
Information Exchange Object Type	M		9.2.1.36A		YES	reject
CHOICE <i>Information Exchange Object Type</i>	M				YES	reject
->>Cell					–	
>>C-ID	M		9.2.1.9		–	
Information Type	M		9.2.1.36D		YES	reject
Information Report Characteristics	M		9.2.1.36B		YES	reject

9.1.70 INFORMATION EXCHANGE INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Information Exchange ID	M		9.2.1.36C		YES	ignore
CHOICE <i>Information Exchange Object Type</i>	O				YES	ignore
->>Cell					–	
>>Requested Data Value	M		9.2.1.51A		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.71 INFORMATION EXCHANGE INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Information Exchange ID	M		9.2.1.36C		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.72 INFORMATION REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Information Exchange ID	M		9.2.1.36C		YES	ignore
CHOICE <i>Information Exchange Object Type</i>	M				YES	ignore
<i>->>Cell</i>					–	
<i>->>Requested Data Value Information</i>	M		9.2.1.51B		–	

9.1.73 INFORMATION EXCHANGE TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Information Exchange ID	M		9.2.1.36C		YES	ignore

9.1.74 INFORMATION EXCHANGE FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Information Exchange ID	M		9.2.1.36C		YES	ignore
Cause	M		9.2.1.6		YES	ignore

9.1.75 CELL SYNCHRONISATION INITIATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Cell Sync Burst Repetition Period	M		9.2.3.4J		YES	reject
Time Slot Information		<i>0..150..15</i>		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD, only	GLOBAL	reject
>Time Slot	M		9.2.3.23		–	
Cell Sync Burst Transmission Initiation Information		<i>0..10..1</i>		Applicable to 3.84Mcps TDD only	GLOBAL	reject
>CSB Transmission ID	M		9.2.3.4N			
>SFN	M		9.2.1.53A		–	
>Cell Sync Burst Code	M		9.2.3.4G		–	

>Cell Sync Burst Code sShift	M		9.2.3.4H			
>Initial DL tTransmission Power	M		DL Power 9.2.1.21		–	
Cell Sync Burst Measurement Initiation Information		0..10..4		Applicable to 3.84Mcps TDD only	GLOBAL	reject
>CSB Measurement ID	M		9.2.3.4I			
>Cell Sync Burst Code	M		9.2.3.4G		–	
>Cell Sync Burst Code sShift	M		9.2.3.4H			
>Synchronisation Report Type	M		9.2.3.18 ^E		–	
>SFN	O		9.2.1.53A		–	
>Synchronisation Report Characteristics	M		9.2.3.18D		–	
SYNC_DL Code Transmission Initiation Information LCR		0..10..4		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>CSB Transmission ID	M		9.2.3.4N		–	
>SFN	M		9.2.1.53A		–	
>UARFCN	M		9.2.1.65		–	
>SYNC_DL Code ID	M		9.2.3.18B		–	
>DwPCH Power	M		9.2.3.5B		–	
SYNC_DL Code Measurement Initiation Information LCR		0..10..4		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>CSB Measurement ID	M		9.2.3.4I		–	
>SFN	O		9.2.1.53A		–	
>UARFCN	M		9.2.1.65		–	
>SYNC_DL Code ID	M		9.2.3.18B		–	
>Synchronisation Report Type	M		9.2.3.18E		–	
>Synchronisation Report Characteristics	M		9.2.3.18D		–	

9.1.76 CELL SYNCHRONISATION INITIATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.77 CELL SYNCHRONISATION INITIATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.78 CELL SYNCHRONISATION RECONFIGURATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Time Slot	M		9.2.3.23	Applicable to 3.84Mcps TDD only. For 1.28Mcps TDD, the CRNC should set this to 0 and the Node B shall ignore it	YES	reject
Number of Cycles per SFN Period	M		9.2.3.7B		YES	reject
Number of Repetitions per Cycle Period	M		9.2.3.7C		YES	reject
Cell Sync Burst Transmission Reconfiguration Information		$0..<max\ of\ Cell\ Sync\ Bursts>0..$ <maxno of CellSyncBursts>		Applicable to 3.84Mcps TDD only	Global	reject
>CSB Transmission ID	M		9.2.3.4N		–	
>Sync Frame Number to Transmit	M		Sync Frame Number 9.2.3.18C		–	
>Cell Sync Burst Code	O		9.2.3.4G		–	
>Cell Sync Burst Code Shift	O		9.2.3.4H		–	
>DL Transmission Power	O		DL Power 9.2.1.21		–	
Cell Sync Burst Measurement Reconfiguration Information		$0..10..4$		Applicable to 3.84Mcps TDD only	YES	reject
>Cell Sync Burst Measurement Information		$1..<max\ of\ Cell\ Sync\ Bursts>1..$ <maxno of CellSyncBursts>			GLOBAL	reject
>>Sync Frame Number to Receive	M		Sync Frame Number 9.2.3.18C		–	
>>Cell Sync Burst Information		$1..<max\ of\ reception\ s\ per\ Sync\ Frame>1..$ <maxno of reception\ s\ per\ SyncFrame>			–	
>>>CSB Measurement ID	M		9.2.3.4I		–	
>>>Cell Sync Burst	M		9.2.3.4G		–	

Code						
>>>Cell Sync Burst Code sShift	M		9.2.3.4H		–	
>Synchronisation Report Type	O		9.2.3.18E		YES	reject
>Synchronisation Report Characteristics	O		9.2.3.18D		YES	reject
Number eOf sSubcycles pPer eCycle pPeriod	O		9.2.3.7D	Applicable to 1.28Mcps TDD only	YES	reject
SYNC_DL Code Transmission Reconfiguration Information LCR		<i>0..<maxno ofSyncFramesLCR> 0.. <maxnoof SyncFramesLCR></i>		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>CSB Transmission ID	M		9.2.3.4N		–	
>Sync Frame nNumber fFor tTransmission	M		Sync Frame nNumber 9.2.3.18C		–	
>UARFCN	M		9.2.1.65		–	
>SYNC_DL Code ID	O		9.2.3.18B		–	
>DwPCH Power	O		9.2.3.5B		–	
SYNC_DL Code Measurement Reconfiguration Information LCR		<i>0..10..4</i>		Applicable to 1.28Mcps TDD only	YES	reject
>SYNC_DL Code Measurement Information LCR		<i>1..<maxno ofSyncDL CodesLCR> ≥1.. <maxnoof SyncDL CodesLCR></i>			GLOBAL	reject
>>Sync Frame nNumber tTo rReceive	M		Sync Frame nNumber 9.2.3.18C		–	
>>Sync_DLCode Information LCR		<i>1..<maxno ofreceptionsperSync FrameLCR> ≥1..<maxnoofreceptionsperSyncFrameLCR></i>			–	
>>>CSB Measurement ID	M		9.2.3.4I		–	
>>>SYNC_DL Code ID	M		9.2.3.18B		–	
>>>UARFCN	M		9.2.1.65		–	
>>>Propagation Delay Compensation	O		Timing Adjustment vValue 9.2.3.22a		–	
>Synchronisation Report Type	O		9.2.3.18E		YES	reject
>Synchronisation Report Characteristics	O		9.2.3.18D		YES	reject

Range bBound	Explanation
<u>maxnoofCellSyncBursts</u> <u>maxnoofCellSyncBursts</u>	Maximum number of cell synchronisation bursts per cycle for 3.84Mcps TDD
<u>maxnoofreceptionsperSyncFrame</u> <u>maxnoofreceptionsperSyncFrame</u>	Maximum number of cell synchronisation burst receptions per Sync Frame for 3.84Mcps TDD
<u>maxnoofSyncFramesLCR</u> <u>maxnoofSyncFramesLCR</u>	Maximum number of Sync Frames per subcycle for 1.28Mcps TDD
<u>maxnoofreceptionsperSyncFrameLCR</u> <u>maxnoofreceptionsperSyncFrameLCR</u>	Maximum number of SYNC_DL Code ID receptions per Sync Frame for 1.28Mcps TDD

9.1.79 CELL SYNCHRONISATION RECONFIGURATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.80 CELL SYNCHRONISATION RECONFIGURATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.81 CELL SYNCHRONISATION REPORT [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Cell Synchronisation Information		<u>0..<maxCellInNodeB></u> 0.. <maxCellInNodeB>		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD-only	EACH	ignore
>C-ID	M		9.2.1.9		YES	ignore
>CHOICE Synchronisation Report Type					YES	ignore
>>>>Initial Phase or Steady-State Phase					–	
>>>>Cell Sync Burst Measured Information		<u>1..<maxnoofCellSyncBursts>1..</u> <maxnoofCellSyncBursts>			–	
>>>>SFN	M		9.2.1.53A		–	
>>>>Cell Sync Burst		<u>1..<maxnoofreceptio</u>			–	

Information		<i>nsperSync Frame>1..<maxnoofreceptionsperSyncFrame></i>				
>>>>CHOICE Cell Sync Burst Availability Indicator	M				-	
>>>>>Cell Sync Burst Available					-	
>>>>>>Cell Sync Burst Timing	M		9.2.3.4L		-	
>>>>>>Cell Sync Burst SIR	M		9.2.3.4K		-	
>>>>>>Cell Sync Burst <i>#Not Available</i>			NULL		-	
>>>Accumulated Clock <i>#Update</i>	O		Timing Adjustment Value 9.2.3.22a		-	
>>>SYNC_DL Codes Measured Information		<i>0..<maxnofSyncFramesLCR>0..<maxnofSyncFramesLCR></i>		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD-only	YES	ignore
>>>>SFN	M		9.2.1.53A		-	
>>>>>SYNC_DL Code Information		<i>1..<maxnofreceptionsperSyncFrameLCR>≥1..<maxnofreceptionsperSyncFrameLCR></i>			-	
>>>>>>CHOICE SYNC_DL Code SYNC_DL Code Availability Indicator	M				-	
>>>>>>>SYNC_DL Code >>>>>>>SYNC_DL Code Available					-	
>>>>>>>>SYNC_DL Code ID Timing	M		Cell Sync Burst Timing 9.2.3.4L		-	
>>>>>>>>SYNC_DL Code ID SIR	M		Cell Sync Burst SIR 9.2.3.4K		-	
>>>>>>>>>SYNC_DL Code >>>>>>>>>SYNC_DL Code <i>#Not Available</i>			NULL		-	
>>>>>Late-Entrant Cell			NULL		-	
>>>>>Frequency Acquisition			NULL		-	

Range bBound	Explanation
<u>maxCellinNodeB</u> <u>maxCellinNodeB</u>	Maximum number of Cells in a Node B
<u>maxnoofCellSyncBursts</u> <u>maxnoofCellSyncBursts</u>	Maximum number of cell synchronisation bursts per cycle for 3.84Mcps TDD
<u>maxnoofreceptionsperSyncFrame</u> <u>maxnoofreceptionsperSyncFrame</u>	Maximum number of cell synchronisation burst receptions per Sync Frame for 3.84Mcps TDD
<u>maxnoofSyncFramesLCR</u> <u>maxnoofSyncFramesLCR</u>	Maximum number of SYNC_Frames per measurement reporting period for 1.28Mcps TDD
<u>maxnoofreceptionsperSyncFrameLCR</u> <u>maxnoofreceptionsperSyncFrameLCR</u>	Maximum number of SYNC_DL Code ID receptions per Sync Frame for 1.28Mcps TDD

9.1.82 CELL SYNCHRONISATION TERMINATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	ignore
CSB Transmission ID	O		9.2.3.4N		YES	ignore
CSB Measurement ID	O		9.2.3.4I		YES	ignore

9.1.83 CELL SYNCHRONISATION FAILURE INDICATION [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	ignore
CSB Transmission ID	O		9.2.3.4N		YES	ignore
CSB Measurement ID	O		9.2.3.4I		YES	ignore
Cause	M		9.2.1.6		YES	ignore

9.1.84 CELL SYNCHRONISATION ADJUSTMENT REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Cell Adjustment Information		<u>1..<maxCellinNodeB></u> <u>1..</u> <u><maxCellinNodeB></u>			EACH	ignore
>C-ID	M		9.2.1.9		–	
>Frame Adjustment <u>v</u> value	O		9.2.3.5C		–	
>Timing Adjustment <u>v</u> value	O		9.2.3.22a		–	
>DL Transmission Power	O		9.2.1.21		–	
>SFN	O		9.2.1.53A		–	

>DwPCH Power	O		9.2.3.5B	Applicable to 1.28Mcps TDD only	YES	ignore
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Range bBound	Explanation
maxCellInNodeBMaxCellInNodeB	Maximum number of Cells in a Node B

9.1.85 CELL SYNCHRONISATION ADJUSTMENT RESPONSE [TDD]

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.86 CELL SYNCHRONISATION ADJUSTMENT FAILURE [TDD]

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CHOICE eCause lLevel	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		–	
>Cell sSpecific					–	
>>Unsuccessful Cell Information Response		1..<maxCellInNodeB> 1..<maxCellInNodeB>			EACH	ignore
>>>C-ID	M		9.2.1.9		–	
>>>Cause	M		9.2.1.6		–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range bBound	Explanation
maxCellInNodeBMaxCellInNodeB	Maximum number of Cells in a Node B

9.1.87 BEARER REARRANGEMENT INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All_CRNCCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Signalling Bearer Request Indicator	O		9.2.1.55A		YES	ignore
DCHs to Re-arrange		0..<maxno of DCHs>			GLOBAL	ignore
>DCH ID	M		9.2.1.20		–	
DSCHs to Re-arrange		0..<maxno of DSCHs>			GLOBAL	ignore
>DSCH ID	M		9.2.1.27		–	
USCHs to Re-arrange		0..<maxno of USCHs> 0..<Maxno of USCHs>		TDD only	GLOBAL	ignore
>USCH ID	M		9.2.3.27		–	
TFCI2 Bearer Request Indicator	O		9.2.1.56C	FDD only	YES	ignore

9.1.88 RADIO LINK ACTIVATION COMMAND

9.1.88.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48		YES	reject
Transaction ID	M		9.2.1.62		–	
Delayed Activation Information		1..<maxno of RLS>			EACH	reject
—>RL ID	M		9.2.1.53		–	
—>Delayed Activation Update	M		9.2.1.24D		–	

9.1.88.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
Node B Communication Context ID	M		9.2.1.48		YES	reject
Transaction ID	M		9.2.1.62		-	
Delayed Activation Information		1..<maxno ofRLs>			EACH	reject
→RL ID	M		9.2.1.53		-	
→Delayed Activation	M		9.2.1.24D		-	
→Update						

9.2 Information Element Functional Definition and Contents

9.2.0 General

Subclause 9.2 presents the NBAP IE definitions in tabular format. The corresponding ASN.1 definition is presented in Subclause 9.3. In case there is a contradiction between the tabular format in Subclause 9.2 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, where the tabular format shall take precedence.

When specifying information elements which are to be represented by bitstrings, if not otherwise specifically stated in the semantics description of the concerned IE or elsewhere, the following principle applies with regards to the ordering of bits:

- The first bit (leftmost bit) contains the most significant bit (MSB);
- The last bit (rightmost bit) contains the least significant bit (LSB);
- When importing bitstrings from other specifications, the first bit of the bitstring contains the first bit of the concerned information;

9.2.1 Common parameters

9.2.1.1 Add/Delete Indicator

The add/delete indicator shall notify the CRNC whether the associated resource has been added to or removed from the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Add/Delete Indicator			ENUMERATED_(Add, Delete)	

9.2.1.1A Allocation/Retention Priority

This parameter indicates the priority level in the allocation and retention of Node B internal resources. See Annex A.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Priority Level	M		INTEGER (spare (0), highest (1), ..., lowest (14), no priority (15)) (0..15)	This IE indicates the priority of the request. Usage: Value "0" means "Spare": It shall be treated as a logical error if received. Values between "1" and "14" are ordered in decreasing order of priority, "1" being the highest and "14" the lowest. Value "15" means "No Priority". Value "0" shall be treated as a logical error if received.
Pre-emption Capability	M		ENUMERATED_ (shall not trigger pre-emption, may trigger pre-emption)	
Pre-emption Vulnerability	M		ENUMERATED (not pre-emptable, pre-emptable)	

9.2.1.2 Availability Status

The availability status is used to indicate more detailed information of the availability of the resource. In accordance with ref. [6], following values are defined. If the value of this attribute is an empty set, this implies that none of the status conditions described in ref. [6] are present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Availability Status			ENUMERATED (empty, in test, failed, power off, off line, off duty, dependency, degraded, not installed, log full, ...)	

9.2.1.3 BCCH Modification Time

Indicates the time after which the new system information shall be applied on BCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
BCCH Modification Time			INTEGER Integer (0..511)	All SFN values in which MIB may be mapped are allowed. The tabular description is presented in [18].

9.2.1.4 Binding ID

The Binding ID is the identifier of a user data stream.

In case of transport bearer establishment with ALCAP [2][31], this IE contains the identifier that is allocated at the Node B and that is unique for each transport bearer under establishment to/from the Node B.

If the Transport Layer Address contains an IP address [29], this IE contains the UDP port [30] intended to be used for the user plane transport.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Binding ID			OCTET STRING Octetstring-(1..4,...)	If the Binding ID includes an UDP port, the UDP port is included in octets 1 and 2. The first octet of the UDP port field shall be included in the first octet of the Binding ID.

9.2.1.4A BLER

This Block Error Rate defines the target radio interface Transport Block Error Rate of the transport channel. BLER is used by the Node B to determine the needed SIR targets, for admission control and power management reasons.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
BLER			INTEGER (-63..0)	Step 0.1. (Range --6.3...0). It is the Log10 of the BLER

9.2.1.5 Blocking Priority Indicator

The Blocking priority indicator shall indicate the immediacy with which a resource should be blocked from use. The following priority classes shall be supported in the Blocking priority indicator.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Blocking Priority Indicator			ENUMERATED_(High, Normal, Low, ...)	"High" priority: Block resource immediately. "Normal" priority: Block resource when idle or upon timer expiry. "Low" priority: Block resource when idle.

9.2.1.5A Burst mode parameters

The *Burst mode parameters* IE provides information to be applied for IPDL burst mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
Burst Start	M		INTEGER (0..15)	See [10] and [21]
Burst Length	M		INTEGER (10..25)	See [10] and [21]
Burst Freq	M		INTEGER (1..16)	See [10] and [21]

9.2.1.6 Cause

IE/Group Name	Presence	Range	IE #Type and #Reference	Semantics #Description
CHOICE Cause Group				
>Radio Network Layer				
>>Radio Network Layer Cause	M		EnumeratedENUMERATED (unknown C-ID, Cell not available, Power level not supported, DL radio resources not available, UL radio resources not available, RL Already Activated/allocated, Node B Resources Unavailable, Measurement not supported for the object, Combining Resources not available, Requested configuration not supported, Synchronization failure, Priority transport channel established, SIB Origination in Node B not Supported, Requested Tx Diversity Mode not supported, Unspecified, BCCH scheduling error, Measurement Temporarily not Available, Invalid CM Setting, Reconfiguration CFN not elapsed, Number of DL codes not supported, S-CPICH not supported, Combining not supported, UL SF not supported, DL SF not supported, Common Transport Channel Type not supported, Dedicated Transport Channel Type not supported, Downlink Shared Channel Type not supported, Uplink Shared Channel Type not supported, CM not supported, Tx diversity no longer supported, Unknown Local Cell ID, ..., Number of UL codes not supported, Information temporarily not available, Information Provision not supported for the object, Cell Synchronisation not supported, Cell Synchronisation Adjustment not supported, DPC Mode Change not Supported,	

			IPDL already activated, IPDL not supported, IPDL parameters not available, Frequency Acquisition not supported, Power Balancing status not compatible, Requested type of Bearer Re-arrangement not supported, Signalling Bearer Re-arrangement not supported, Bearer Re-arrangement needed, Delayed Activation not Supported, RL Timing Adjustment not supported)	
>Transport Layer				
>>Transport Layer Cause	M		EnumeratedENUMERATED (Transport resource unavailable, Unspecified, ...)	
>Protocol				
>>Protocol Cause			EnumeratedENUMERATED (Transfer syntax error, Abstract syntax error (reject), Abstract syntax error (ignore and notify), Message not compatible with receiver state, Semantic error, Unspecified, Abstract syntax error (falsely constructed message), ...)	
>Misc				
>>Miscellaneous Cause	M		EnumeratedENUMERATED (Control processing overload Hardware failure, O&M intervention, Not enough user plane processing resources, Unspecified, ...)	

The meaning of the different cause values is described in the following table. In general, "not supported" cause values indicate that the concerning-concerned capability is missing. On the other hand, "not available" cause values indicate that the concernedeoneerning capability is present, but insufficient resources were available to perform the requested action.

Radio Network Layer cause	Meaning
BCCH scheduling error	The Node B has detected an illegal BCCH schedule update (see subclause 8.2.16.3).
Bearer Re-arrangement needed	The Node B can-not perform the requested Radio Link Reconfiguration without bearer re-arrangement.

Cell not Available;	The concerned concerning cell or local cell is not available.
Cell Synchronisation not supported	The concerned concerning cell(s) do not support Cell Synchronisation.
Combining not supported	The Node B does not support RL combining for the concerned concerning cells.
Combining Resources Not Available	The value of the received <i>Diversity Control Field</i> IE was set to "Must", but the Node B cannot perform the requested combining.
CM not supported	The concerning concerned cell(s) do not support Compressed Mode.
Common Transport Channel Type not supported	The concerning concerned cell(s) do not support the RACH and/or FACH and/or CPCH Common Transport Channel Type.
Dedicated Transport Channel Type not supported	The concerning concerned cell(s) do not support the Dedicated Transport Channel Type.
Delayed Activation not Supported	The concerned ing cell(s) do not support delayed activation of RLs.
DL Radio Resources not Available	The Node B does not have sufficient DL radio resources available.
DL SF not supported	The concerning concerned cell(s) do not support the requested DL SF.
DL Shared Channel Type not supported	The concerning concerned cell(s) do not support the Downlink Shared Channel Type.
DPC Mode Change not Supported	The concerning concerned cells do not support DPC mode changes.
Frequency Acquisition not supported	The concerning concerned cell(s) do not support Frequency Acquisition.
Information Provision not supported for the object	The requested information provision is not supported for the concerned object types.
Information temporarily not available	The requested information can temporarily not be provided.
Invalid CM Settings	The concerning concerned cell(s) consider the requested Compressed Mode settings invalid.
IPDL already activated	The concerning concerned cell(s) have already active IPDL ongoing.
IPDL not supported	The concerning concerned cell(s) do not support the IPDL.
IPDL parameters not available	The concerning concerned cell(s) do not have IPDL parameters defining IPDL to be applied.
Measurement not Supported For The Object	At least one of the concerning concerned cell(s) does not support the requested measurement on the concerning concerned object type.
Measurement Temporarily not Available	The Node B can temporarily not provide the requested measurement value.
Node B resources unavailable	The Node B does not have sufficient resources available.
Number of DL codes not supported	The concerning concerned cell(s) do not support the requested number of DL codes.
Number of UL codes not supported	The concerning concerned cell(s) do not support the requested number of UL codes.
Power Level not Supported	A DL power level was requested which the concerning concerned cell(s) do not support.
Power Balancing status not compatible	The power balancing status in the SRNC is not compatible with that of the Node B.
Priority transport channel established	The CRNC cannot perform the requested blocking since a transport channel with a high priority is present.
RL Timing Adjustment not Supported	The concerning ed cell(s) do not support adjustments of the RL timing.
Reconfiguration CFN not elapsed	The requested action cannot be performed due to that a RADIO LINK RECONFIGURATION COMMIT message was received previously, but the concerning concerned CFN has not yet elapsed.
Requested Configuration not Supported	The concerning concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters.
Requested Type of Bearer Re-arrangement not supported	The Node B does not support the requested type of bearer re-arrangement.
Requested Tx Diversity mode not supported	The concerning concerned cell(s) do not support the requested transmit diversity mode.
RL already Activated/ allocated	The Node B has already allocated an RL with the requested RL-id for this UE context.
S-CPICH not supported	The concerning concerned cell(s) do not support S-CPICH.
SIB Origination in Node B not Supported	The Node B does not support the origination of the requested SIB for the concerning concerned cell.
Signalling Bearer Re-arrangement not supported	The Node B does not support the Signalling bearer re-arrangement.

Synchronisation Failure	Loss of UL Uu synchronisation.
Cell Synchronisation Adjustment not supported	The concerning cell(s) do not support Cell Synchronisation Adjustment.
Tx diversity no longer supported	Tx diversity can no longer be supported in the concerning cell.
UL Radio Resources not Available	The Node B does not have sufficient UL radio resources available.
UL SF not supported	The concerning cell(s) do not support the requested minimum UL SF.
UL Shared Channel Type not supported	The concerning cell(s) do not support the Uplink Shared Channel Type.
Unknown C-ID	The Node B is not aware of a cell with the provided C-ID.
Unknown Local Cell ID	The Node B is not aware of a local cell with the provided Local Cell ID
Unspecified	Sent when none of the above cause values applies but still the cause is Radio Network layer related.

Transport Network Layer cause	Meaning
Transport resource unavailable	The required transport resources are not available.
Unspecified	Sent when none of the above cause values applies but still the cause is Transport Network layer related.

Protocol cause	Meaning
Abstract Syntax Error (Reject)	The received message included an abstract syntax error and the concerning criticality indicated "reject" (see subclause 10.3).
Abstract Syntax Error (Ignore and Notify)	The received message included an abstract syntax error and the concerning criticality indicated "ignore and notify" (see subclause 10.3).
Abstract syntax error (falsely constructed message)	The received message contained IEs in wrong order or with too many occurrences (see subclause 10.3).
Message not Compatible with Receiver State	The received message was not compatible with the receiver state (see subclause 10.4).
Semantic Error	The received message included a semantic error (see subclause 10.4).
Transfer Syntax Error	The received message included a transfer syntax error (see subclause 10.2).
Unspecified	Sent when none of the above cause values applies but still the cause is protocol related.

Miscellaneous cause	Meaning
Control Processing Overload	Node B control processing overload.
Hardware Failure	Node B hardware failure.
Not enough User Plane Processing Resources	Node B has insufficient user plane processing resources available.
O&M Intervention	Operation and Maintenance intervention related to Node B equipment.
Unspecified	Sent when none of the above cause values applies and the cause is not related to any of the categories Radio Network Layer, Transport Network Layer or Protocol.

9.2.1.7 CFN

Connection Frame Number for the radio connection, see ref. [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
CFN			INTEGER Integer (0..255)	

9.2.1.8 CFN Offset

Void

9.2.1.9 C-ID

The C-ID (Cell identifier) is the identifier of a cell in one RNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
C-ID			INTEGER (0..65535)	

9.2.1.9A Common Channels Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the allocated Spreading Factor. [FDD_ For the PRACH, the reference spreading factor shall be the minimum possible spreading factor amongst the ones defined by the *RACH Slot Format* 'RACH slot format' IE(s) in the Common Transport Channel Setup or Reconfiguration procedures. For the PCPCH, the reference spreading factor shall be the minimum spreading factor computed from the TFCS as described in [8].]

This capacity consumption law indicates the consumption law to be used with the following procedures:-

- Common Transport Channel Setup
- Common Transport Channel Deletion
- [FDD_ Common Transport Channel Reconfiguration]

For the Common Transport Channel Setup procedure, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall be credited to the Capacity Credit for the Common Transport Channel Deletion one.

[FDD_ For the Common Transport Channel Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited if this difference is negative).]

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the "DL cost" shall be applied to the "DL or Global Capacity Credit" and the "UL Cost" shall be applied to the "UL Capacity Credit". If it is modelled as shared resources, both the "DL cost" and the "UL cost" shall be applied to the "DL or Global Capacity Credit".

[FDD_ When the Common Transport Channel Setup, Deletion or Reconfiguration procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH, AICH, PCPCH, CD/CA-ICH and AP-AICH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

[FDD_ The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by a physical channel, the cost credited to or debited from the Capacity Credit for this physical channel shall be taken as N times the cost given in the consumption law, where N is the number of channelization codes.]

[TDD - When the Common Transport Channel Setup, or Deletion procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SF Allocation Law SF allocation-law		1..<maxno of SFs><MaxNumber Of SF>		[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD – For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL cost	M		INTEGER (0..65535)	
>UL cost	M		INTEGER (0..65535)	

Range Bound	Explanation
MmaxNumberOfSFs	Maximum number of Spreading Factors

9.2.1.9B Common Measurement Accuracy

The *Common Measurement Accuracy* IE indicates the accuracy of the common measurement.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Common Measurement Accuracy</i>				
-> >T _{UTRAN-GPS} Measurement Accuracy Class				
>>T _{UTRAN-GPS} Measurement Accuracy Class	M		T _{UTRAN-GPS} Accuracy Class 9.2.1.64C	

9.2.1.10 Common Measurement Object Type

The *Common Measurement Object* type indicates the type of object that the measurement is to be performed on.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
<i>Common Measurement Object Type</i>			ENUMERATED (CELL, RACH, CPCH,...)	

Void.

9.2.1.11 Common Measurement Type

The *Common Measurement Type* identifies which measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Measurement Type			ENUMERATED (Received t_{Total} w_{Wide} b_{Band} p_{Power} , Transmitted Carrier Power, Acknowledged PRACH p_{P} Preambles, UL Timeslot ISCP, Acknowledged PCPCH Access Preambles, Detected PCPCH Access Preambles, ..., UTRAN GPS Timing of Cell Frames for <u>LCSUE Positioning</u> , SFN-SFN Observed Time Difference)	"UL Timeslot ISCP" is used by TDD only, "Acknowledged PRACH p_{P} Preambles", "Acknowledged PCPCH Access Preambles", 'Detected PCPCH Access Preambles' are used by FDD only

9.2.1.12 Common Measurement Value

The Common Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE <i>Common Measurement Value</i>					☐	
->>Transmitted Carrier Power					☐	
>>Transmitted Carrier Power Value	M		INTEGER (0..100)	According to mapping in [22] and [23]	☐	
->>Received Total Wide Band Power					☐	
>>Received Total Wide Band Power Value	M		INTEGER (0..621)	According to mapping in [22] and [23]	☐	
->>Acknowledged PRACH Preambles				FDD Only	☐	
>>Acknowledged PRACH Preamble Value	M		INTEGER (0..240,...)	According to mapping in [22]	☐	
->>UL Timeslot ISCP				TDD Only	☐	
>>UL Timeslot ISCP	M		INTEGER (0..127)	According to mapping in [23]	☐	
->>Acknowledged PCPCH Access Preambles				FDD Only	☐	
>>Acknowledged PCPCH Access Preambles	M		INTEGER (0..15,...)	According to mapping in [22]	☐	
->>Detected PCPCH Access Preambles				FDD Only	☐	
>>Detected PCPCH Access Preambles	M		INTEGER (0..240,...)	According to mapping in [22]	☐	
>>Additional Common Measurement Values					☐	
>>UTRAN GPS Timing of Cell Frames for LCSUE Positioning					☐	
>>>T _{UTRAN-GPS} Measurement Value Information	M		9.2.1.64A		YES	ignore
>>SFN-SFN Observed Time Difference					☐	
>>>SFN-SFN Measurement Value Information	M		9.2.1.53E		YES	ignore

9.2.1.12A Common Measurement Value Information

The *Common Measurement Value Information* IE provides information both on whether or not the Common Measurement Value is provided in the message or not and if provided also the Common Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Measurement Availability Indicator</i>	M			
>>>Measurement Available				
>>Common Measurement Value	M		9.2.1.12	
>>>Measurement <i>n</i> Not Available			NULL	

9.2.1.13 Common Physical Channel ID

Common Physical Channel ID is the unique identifier for one common physical channel within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID			Integer INTEGER (0..255)	

9.2.1.13A Common Physical Channel Status Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID	M		9.2.1.13	
Resource Operational State	M		9.2.1.52	
Availability Status	M		9.2.1.2	

9.2.1.14 Common Transport Channel ID

Common Transport Channel ID is the unique identifier for one common transport channel within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID			Integer INTEGER (0..255)	

9.2.1.14A Common Transport Channel Information Response

The *Common Transport Channel Information Response* IE provides information for Common Transport Channels that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID	M		9.2.1.14	
Binding ID	O		9.2.1.4	
Transport Layer Address	O		9.2.1.63	

9.2.1.14B Common Transport Channel Status Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID	M		9.2.1.14	
Resource Operational State	M		9.2.1.52	
Availability Status	M		9.2.1.2	

9.2.1.15 Communication Control Port ID

A Communication Control Port corresponds to one signalling bearer between the CRNC and the Node B for the control of Node B Communication Contexts. The Node B may have multiple Communication Control Ports (one per Traffic Termination Point). The Communication Control Port is selected at creation of the Node B Communication Context. The Communication Control Port ID is the identifier of the Communication Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Communication Control Port ID			INTEGER (0..65535)	

9.2.1.16 Configuration Generation ID

The Configuration Generation ID describes the generation of the configuration of logical resources in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Configuration Generation ID			INTEGER (0..255)	Value "0" means "No configuration". At possible wraparound of the ID counter in CRNC the value "0" shall not be used.

9.2.1.17 Criticality Diagnostics

The *Criticality Diagnostics* IE is sent by a Node B or the CRNC when parts of a received message have not been comprehended or are missing, or if the message contained logical errors. When applicable, it contains information about which IEs that were not comprehended or were missing.

For further details on how to use the *Criticality Diagnostics* IE, see Annex C.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Procedure ID		0..10..1		Procedure ID is to be used if Criticality Diagnostics is part of Error Indication procedure, and not within the response message of the same procedure that caused the error	⚠	
>Procedure Code	M		INTEGER (0..255)		⚠	
>Ddmode	M		ENUMERATED (FDD, TDD, FDD, Common, ...)	"Common" = common to FDD and TDD.	⚠	
Triggering Message	O		ENUMERATED_(initiating message, successful outcome, unsuccessful outcome, outcome)	The Triggering Message is used only if the Criticality Diagnostics is part of Error Indication.	⚠	
Procedure Criticality	O		ENUMERATED_(reject, ignore, notify)	This Procedure Criticality is used for reporting the Criticality of the Triggering message (Procedure).	⚠	
Transaction ID	O		Transaction ID 9.2.1.62		⚠	
Information Element Criticality Diagnostics		0..<max no of errors>			⚠	
>IE Criticality	M		ENUMERATED_(reject, ignore, notify)	The IE Criticality is used for reporting the criticality of the triggering IE. The value "ignore" shall never be used.	⚠	
>IE ID	M		INTEGER (0..65535)	The IE ID of the not understood or missing IE	⚠	
>Repetition Number	O		INTEGER (0..255)	The Repetition Number IE gives: <ul style="list-style-type: none"> in case of a not understood IE: The number of occurrences of the reported IE up to and including the not understood occurrence in case of a missing IE: The number of occurrences up to but not including the missing occurrence. 	⚠	

				Note: All the counted occurrences of the reported IE must have the same topdown hierachical message structure of IEs with assigned criticality above them.		
>Message Structure	O		9.2.1.45A	The <i>Message Structure</i> IE describes the structure where the not understood or missing IE was detected. This IE is included if the not understood IE is not the top level of the message.	YES	ignore
>Type <i>eOf</i> Error	M		ENUMERATED_(not understood, missing, ...)		YES	ignore

Range <i>bBound</i>	Explanation
<i>Mmaxnooferrors</i>	Maximum <i>no-number</i> of IE errors allowed to be reported with a single message.

9.2.1.18 CRNC Communication Context ID

The CRNC Communication Context ID is the identifier of the Communication Context in the CRNC.

IE/Group Name	Presence	Range	IE <i>tType</i> and <i>rReference</i>	Semantics <i>dDescription</i>
CRNC Communication Context ID			INTEGER (0..2 ²⁰ - 1)	"2 ²⁰ -1" is a reserved value to indicate all the CRNC <i>eCommunication eContexts</i> that can be reached by the <i>eCommunication eControl pPort</i> (All CRNCCC).

9.2.1.18A CTFC

The CTFC is an integer number calculated in accordance with [18], subclause 14.10. Regarding the channel ordering, for all transport channels, 'TrCH1' corresponds to the transport channel having the lowest transport channel identity among all configured transport channels on this CCTrCH. 'TrCH2' corresponds to the transport channel having the next lowest transport channel identity, and so on.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE CTFC Format				
>2 bits long				
>>CTFC value	M		INTEGER (0..3)	
>4 bits long				
>>CTFC value	M		INTEGER (0..15)	
>6 bits long				
>>CTFC value	M		INTEGER (0..63)	
>8 bits long				
>>CTFC value	M		INTEGER (0..255)	
>12 bits long				
>>CTFC value	M		INTEGER (0..4095)	
>16 bits long				
>>CTFC value	M		INTEGER (0..65535)	
>max nb bits long				
>>CTFC value	M		INTEGER (0..maxCTFC)	

Range Bound	Explanation
MaxCTFC	Maximum number of the CTFC value is calculated according to the following: $\sum_{i=1}^I (L_i - 1)P_i$ with the notation according to ref. [18]

9.2.1.19 DCH Combination Indicator

Void

9.2.1.20 DCH ID

The DCH ID is the identifier of an active dedicated transport channel. It is unique for each active DCH among the active DCHs simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCH ID			INTEGER (0..255)	

9.2.1.20A Dedicated Channels Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the [FDD - allocated Spreading Factor and the RL/RLS situation] [TDD – allocated Spreading Factor on each DPCH and the assigned timeslot]. [FDD - In uplink, the reference spreading factor shall be the minimum spreading factor signalled in the Radio Link Setup Request message (*Min UL Channelisation Code Length* IE).]

This capacity consumption law indicates the consumption law to be used with the following procedures :

- Radio Link Setup
- Radio Link Addition
- Radio Link Reconfiguration
- Radio Link Deletion
- [TDD - Physical Shared Channel Reconfiguration]

For the Radio Link Setup and Radio Link Addition procedures, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall be credited to the Capacity Credit for the Radio Link Deletion procedure. For the Radio Link Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited when this difference is negative).

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the DL cost shall be applied to the DL or Global Capacity Credit and the UL Cost shall be applied to the UL Capacity Credit. If it is modelled as shared resources, both the DL costs and the UL costs shall be applied to the DL or Global Capacity Credit.

[FDD - For a Radio Link creating a Radio Link Set (first RL of a RLS), the cost for the RL (cost 2) and RLS (cost 1) shall be taken into account. When adding a Radio Link to a Radio Link Set, only the RL cost (cost 2) shall be taken into account.

In the case of where multiple Radio Links are established in one procedure, for every created Radio Link Set, the first Radio Link is always the Radio Link with the lowest repetition number.]

[FDD- When a PDSCH is allocated in the Radio Link Setup procedure, the processing cost associated to this PDSCH, equal to the DL cost RL, shall be debited from the Capacity Credit, in addition to the processing cost of the radio links. In a similar way, this cost shall be credited to the Capacity Credit, when a PDSCH is deleted and the difference between the new cost and the old cost shall be debited from the Capacity Credit (or credited if this difference is negative) when a PDSCH is reconfigured.]

[FDD- The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by either the radio links or the PDSCH, the cost credited to or debited from the Capacity Credit shall be taken as N times the cost for one code, where N is the number of channelization codes.]

[TDD –The cost for a radio link is a sum of the costs for each DPCH. For the first DPCH assigned to any user in a cell within a timeslot, the initial cost for a DPCH in a timeslot (cost 1) and the cost for a DPCH (cost 2) shall be taken into account. For any DPCH that is not the first DPCH assigned for any user in a cell within a timeslot, only the cost for a DPCH (cost 2) shall be taken into account.]

[TDD – The cost for shared channels is a the sum of the costs for each PDSCH and PUSCH assigned to a PUSCH or PDSCH set. For the first PDSCH or PUSCH assigned to any user in a cell within a timeslot, the initial cost for a PDSCH/PUSCH in a timeslot (cost 1) and the cost for a PDSCH/PUSCH (cost 2) shall be taken into account. For any PDSCH/PUSCH that is not the first PDSCH/PUSCH assigned to any user in a cell within a timeslot, only the cost for a PDSCH/PUSCH (cost 2) shall be taken into account.]

[TDD - In the case of Physical Shared Channel Reconfiguration, the sum of the consumption cost of the each PDSCH/PUSCH of the previous configuration shall be credited to the capacity credit, and the sum of the consumption cost of each PDSCH/PUSCH of the new configuration shall be subtracted from the capacity credit.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
SF Allocation Law SF allocation-law		1..<maxno of SFs>1..<MaxNumber of SF>		[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD - For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL Cost 1	M		INTEGER (0..65535)	[FDD - This is the cost of a RLS _{DL} .] [TDD - This is the additional cost of the first DPCH/PDSCH/PUSCH assigned to any user in a cell within a timeslot.]
>DL Cost 2	M		INTEGER (0..65535)	[FDD - This is the cost of a RLS _{DL} .] [TDD - This is the cost of a DPCH/PDSCH/PUSCH]
>UL Cost 1	M		INTEGER (0..65535)	FDD - This is the cost of a RLS _{UL} . [TDD - This is the additional cost of the first DPCH/PDSCH/PUSCH assigned to any user in a cell within a timeslot.]
>UL Cost 2	M		INTEGER (0..65535)	[FDD - This is the cost of a RLS _{UL} .] [TDD - This is the cost of a DPCH/PDSCH/PUSCH.]

Range Bound	Explanation
MmaxNumber of SFs	Maximum number of Spreading Factors

9.2.1.20B DL or Global Capacity Credit

The capacity credit indicates to the CRNC the Downlink or global capacity of a Local Cell or a Local Cell Group.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
DL or Global Capacity Credit			INTEGER (0..65535)	

9.2.1.20C DCH Information Response

The *DCH Information Response* IE provides information for DCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
DCH Information Response		1..<maxno of DCHs>1 to <maxno of DCHs>		Only one DCH per set of coordinated DCHs shall be included
>DCH ID	M		9.2.1.20	
>Binding ID	O		9.2.1.4	
>Transport Layer Address	O		9.2.1.63	

Range bBound	Explanation
<i>MmaxnoofDCHs</i>	Maximum number of DCH per UE.

9.2.1.21 DL Power

The *DL Power* ~~DL Power~~-IE indicates a power level relative to the [FDD_ primary CPICH power] [TDD_ primary CCPCH power] configured in a cell. [FDD_ If referred to a DPCH, it indicates the power of the transmitted DPDCH symbols]. [FDD_ If referred to a DL-DPCCH for CPCH, it indicates the power of the transmitted pilot symbols].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power			Enumerated ENUMERATED RATED (-35..+15dB)	Step 0.1dB

9.2.1.22 Dedicated Measurement Object Type

The Dedicated Measurement Object type indicates the type of object that the measurement is to be performed on.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated Measurement Object Type			ENUMERATED (RL, RLS, ALL RL, ALL RLS,...)	

Void.

9.2.1.23 Dedicated Measurement Type

The Dedicated Measurement Type identifies the type of measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated Measurement Type			ENUMERATED (SIR, SIR Error, Transmitted Code Power, RSCP, Rx Timing Deviation, Round Trip Time, ..., Rx Timing Deviation LCR, Angle Of Arrival LCR)	"RSCP" is used by TDD only. "Rx Timing Deviation" is used by 3.84Mcps TDD only. "Rx Timing Deviation LCR" is used by 1.28-Mcps TDD only. "Angle Of Arrival LCR" is used by FDD only. "Round Trip Time", "SIR Error" are used by FDD only. "Angle Of Arrival LCR" is used by 1.28Mcps TDD only.

Note: For definitions of the measurement types refer to [4] and [5].

9.2.1.24 Dedicated Measurement Value

The Dedicated Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE <i>Dedicated Measurement Value</i>					⚠	
->>SIR Value					⚠	
>>SIR <i>Value</i>	M		INTEGER (0..63)	According to mapping in [22] and [23]	⚠	
->>SIR Error Value				FDD only	⚠	
>>SIR <i>Error Value</i>	M		INTEGER (0..125)	According to mapping in [22]	⚠	
->>Transmitted Code Power Value					⚠	
>>Transmitted Code Power Value	M		INTEGER (0..127)	According to mapping in [22] and [23]. Values 0 to 9 and 123 to 127 shall not be used.	⚠	
->>RSCP				TDD only	⚠	
>>RSCP	M		INTEGER (0..127)	According to mapping in [23]	⚠	
->>Rx Timing Deviation Value				Applicable to 3.84Mcps TDD only	⚠	
>>Rx Timing Deviation	M		INTEGER (0..8191)	According to mapping in [23]	⚠	
->>Round Trip Time				FDD only	⚠	
>>Round Trip Time	M		INTEGER (0..32767)	According to mapping in [22]	⚠	
>Additional Dedicated Measurement Values					⚠	
->>>Rx Timing Deviation Value LCR				Applicable to 1.28Mcps TDD only	⚠	
>>>Rx Timing Deviation LCR	M		INTEGER (0..255)	According to mapping in [23]	YES	reject
>> Angle Of Arrival Value LCR				Applicable to 1.28Mcps TDD only	⚠	
>>>AOA Value LCR		1			YES	reject
>>>>AOA LCR	M		INTEGER (0..719)	According to mapping in [23]	⚠	
>>>>AOA LCR Accuracy Class	M		ENUMERATE D_(A, B, C, D, E, F, G, H,...)	According to mapping in [23]	⚠	

9.2.1.24A Dedicated Measurement Value Information

The *Dedicated Measurement Value Information* IE provides information both on whether or not the Dedicated Measurement Value is provided in the message or not and if provided also the Dedicated Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Measurement Availability Indicator</i>	M			
>>Measurement Available				
>>Dedicated Measurement Value	M		9.2.1.24	
>>CFN	O		9.2.1.7	Dedicated Measurement Time Reference
>>Measurement <i>Not Available</i>			NULL	

9.2.1.24B DGPS Corrections

The DGPS Corrections IE contains DGPS information used by the UE Positioning A-GPS method. For further details on the meaning of parameters, see [28].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GPS TOW	M		INTEGER (0..604799)	Time in seconds. This field indicates the baseline time for which the corrections are valid
Status/Health	M		ENUMERATED_(UDRE scale 1.0, UDRE scale 0.75, UDRE scale 0.5, UDRE scale 0.3, UDRE scale 0.1, no data, invalid data)	This field indicates the status of the differential corrections
Satellite Information		$1..<M_{max} NoSat>$		
->SatID	M		INTEGER (0..63)	Satellite ID
->IODE	M		Bit string BIT STRING (8)	This IE is the sequence number for the ephemeris for the particular satellite. It can be used to determine if new ephemeris is used for calculating the corrections that are provided. This eight-bit IE is incremented for each new set of ephemeris for the satellite and may occupy the numerical range of [0, 239] during normal operations.
->UDRE	M		ENUMERATED_(UDRE ≤1.0m, 1.0m < UDRE ≤ 4.0m, 4.0m < UDRE ≤ 8.0m, 8.0m < UDRE)	User Differential Range Error. This field provides an estimate of the uncertainty (1-σ) in the corrections for the particular satellite. The value in this field shall be multiplied by the UDRE Scale Factor in the common Corrections Status/Health field to determine the final UDRE estimate for the particular satellite
->PRC	M		INTEGER (-2047..2047)	Pseudo Range Correction Unit: m (meters) Step: Scaling factor 0.32 meters
->Range Correction Rate	M		INTEGER (-127..127)	Unit: m/s Step: Scaling factor 0.032 m/s

Range Bound	Explanation
$maxNoSat/MaxNoSat$	Maximum number of satellites for which information can be provided

9.2.1.24C Delayed Activation

The *Delayed Activation* IE indicates that the activation of the DL power shall be delayed until an indicated CFN or until a separate activation indication is received.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Delayed Activation</i>	M			
->>CFN				
->> Activation CFN	M		CFN 9.2.1.7	
->>Separate Indication			NULL	

9.2.1.24D Delayed Activation Update

The *Delayed Activation Update* IE indicates a change of the activation of the DL power for a specific RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Delayed Activation Update</i>	M			
> Activate				
>> CHOICE <i>Activation Type</i>				
>>>>Synchronised				
>>>>Activation CFN	M		CFN 9.2.1.7	
>>>>Unsynchronised			NULL	
>>Initial DL TX Power	M		DL Power 9.2.1.21	
>>First RLS Indicator	O		9.2.2.16A	FDD Only
>>Propagation Delay	O		9.2.2.35	FDD Only
>>Deactivate				
>> CHOICE <i>Deactivation Type</i>				
>>>>Synchronised				
>>>>Deactivation CFN	M		CFN 9.2.1.7	
>>>>Unsynchronised			NULL	

9.2.1.25 Diversity Control Field

The Diversity Control Field indicates if the current RL may, must or must not be combined with the already existing RLs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Diversity Control Field			ENUMERATED_(May, Must, Must nNot)	

9.2.1.26 Diversity Indication

The Diversity Indication indicates if the RL has been or has not been combined with another RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Diversity Indication			ENUMERATED_(Combined, nNot cCombined)	

Void.

9.2.1.26A DL DPCH Timing Adjustment

The DL DPCH Timing Adjustment indicates that a timing adjustment of the related radio link is required. It also indicates whether the timing adjustment shall consist of a timing advance or a timing delay with respect to the SFN timing. The adjustment always consists of 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL DPCH Timing Adjustment			ENUMERATED (timing advance, timing delay)	The size of the timing adjustment is 256 chips.

9.2.1.27 DSCH ID

The DSCH ID uniquely identifies a DSCH within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DSCH ID			INTEGER (0..255)	

9.2.1.27A DSCH Information Response

The *DSCH Information Response* IE provides information for DSCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
DSCH Information Response		$1..<maxno\ of\ DSCHs>$ $1\ to$ $<Numof\ DSCH>$		
>DSCH ID	M		9.2.1.27	
>Binding ID	O		9.2.1.4	
>Transport Layer Address	O		9.2.1.63	

Range Bound	Explanation
$M_{maxnoofDSCHs}$	Maximum number of DSCHs for one UE.

9.2.1.28 DSCH Transport Format Set

Void

9.2.1.29 DSCH Transport Format Combination Set

Void

9.2.1.29A End Of Audit Sequence Indicator

Indicates if the AUDIT RESPONSE message ends an audit sequence or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
End Of Audit Sequence Indicator			ENUMERATED_(End of audit sequence, Not end of audit sequence)	"End of audit sequence" = all audit information has been provided by the Node B; "Not end of audit sequence" = more audit information is available.

9.2.1.29B FN Reporting Indicator

The Frame Number Reporting Indicator.

Indicates if the SFN or CFN shall be included together with the reported measurement value.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FN Reporting Indicator			ENUMERATED_(FN Reporting Required, FN Reporting Not Required)	

9.2.1.30 Frame Handling Priority

This parameter indicates the priority level to be used during the lifetime of the DCH/DSCH for temporary restriction of the allocated resources due overload reason.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Handling Priority			INTEGER (0..15)	"0" = lowest priority, " <u>15</u> " = highest priority

9.2.1.31 Frame Offset

The Frame Offset is the required offset between the dedicated channel downlink transmission frames (CFN, Connection Frame Number) and the broadcast channel frame offset (Cell Frame Number). The Frame_offset is used in the translation between Connection Frame Number (CFN) on Iub/Iur and the least significant 8 bits of SFN (System Frame Number) on Uu. The Frame Offset is UE and cell specific.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Offset			INTEGER (0..255)	Frames

9.2.1.31A IB_OC_ID

The IB OC ID identifies the occurrence of a specific Information Block.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB OC ID			INTEGER (1..16)	

9.2.1.31B GPS Navigation Model & Time Recovery

This IE contains subframes 1 to 3 of the GPS navigation message. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Navigation Message 1to3		$1..<Mmax$ $NoSat>$		
—>Transmission TOW	M		INTEGER (0..1048575)	Time of the Week when the message is broadcast.
—>SatID	M		INTEGER (0..63)	Satellite ID of the satellite from which the information is obtained
—>TLM Message	M		Bit stringBIT STRING (14)	
>Tlm Revd (C)	M		Bit stringBIT STRING (2)	
—>HO-Word	M		Bit stringBIT STRING (22)	
—>WN	M		Bit stringBIT STRING (10)	
—>C/A or P on L2	M		Bit stringBIT STRING (2)	
—>User Range Accuracy Index	M		Bit stringBIT STRING (4)	
—>SV Health	M		Bit stringBIT STRING (6)	
—>IODC	M		Bit stringBIT STRING (10)	
—>L2 P Data Flag	M		Bit stringBIT STRING (1)	
—>SF 1 Reserved	M		Bit stringBIT STRING (87)	
—> T_{GD}	M		Bit stringBIT STRING (8)	
—> t_{oc}	M		Bit stringBIT STRING (16)	
—> af_2	M		Bit stringBIT STRING (8)	
—> af_1	M		Bit stringBIT STRING (16)	
—> af_0	M		Bit stringBIT STRING (22)	
-> C_{rs}	M		Bit stringBIT STRING (16)	
—> Δn	M		Bit stringBIT STRING (16)	
—> M_0	M		Bit stringBIT STRING (32)	
—> C_{uc}	M		Bit stringBIT STRING (16)	
—> e	M		Bit stringBIT STRING (32)	
—> C_{us}	M		Bit stringBIT STRING (16)	
—> $(A)^{1/2}$	M		Bit stringBIT STRING (32)	
—> t_{oe}	M		Bit stringBIT STRING (16)	
—>Fit Interval Flag	M		Bit stringBIT STRING (1)	
—>AODO	M		Bit stringBIT STRING (5)	
—> C_{ic}	M		Bit stringBIT STRING (16)	
—> $OMEGA_0$	M		Bit stringBIT STRING (32)	
—> C_{is}	M		Bit stringBIT STRING (16)	
—> i_0	M		Bit stringBIT STRING (32)	

—>C _{rc}	M		Bit string BIT STRING (16)	
—> ω	M		Bit string BIT STRING (32)	
—>OMEGA _{dot}	M		Bit string BIT STRING (24)	
—>ldot	M		Bit string BIT STRING (14)	
—>Spare/zero fill	M		Bit string BIT STRING (20)	

Range Bound	Explanation
maxNoSat MaxNoSat	Maximum number of satellites for which information can be provided

9.2.1.31C GPS Ionospheric Model

This IE provides the information regarding the GPS Ionospheric Model. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
α_0	M		Bit string BIT STRING (8)	
α_1	M		Bit string BIT STRING (8)	
α_2	M		Bit string BIT STRING (8)	
α_3	M		Bit string BIT STRING (8)	
β_0	M		Bit string BIT STRING (8)	
β_1	M		Bit string BIT STRING (8)	
β_2	M		Bit string BIT STRING (8)	
β_3	M		Bit string BIT STRING (8)	

9.2.1.31D GPS UTC Model

This IE provides the information regarding the GPS UTC Model. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
A ₁	M		Bit string BIT STRING (24)	
A ₀	M		Bit string BIT STRING (32)	
t _{tot}	M		Bit string BIT STRING (8)	
Δt_{LS}	M		Bit string BIT STRING (8)	
WN _t	M		Bit string BIT STRING (8)	
WN _{LSF}	M		Bit string BIT STRING (8)	
DN	M		Bit string BIT STRING (8)	
Δt_{LSF}	M		Bit string BIT STRING (8)	

9.2.1.31E -GPS Real-Time Integrity

This IE provides the information regarding the status of the GPS constellation. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Bad Satellites Presence</i>	M			
—> <i>Bad Satellites</i>				
—>> Satellite information		1..<Mmax NoSat>		
—>>>BadSatID	M		INTEGER (0..63)	Satellite ID
> <i>No Bad Satellites</i>			NULL	

Range Bound	Explanation
maxNoSat MaxNoSat	Maximum number of satellites for which information can be provided

9.2.1.31F GPS Almanac

This IE provides the information regarding the GPS Almanac. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
WN _a	M		Bit string BIT STRING (8)	
Satellite information	M	1..<Mmax xNoSat>		
>DataID	M		INTEGER (0..3)	
>SatID	M		INTEGER (0..63)	Satellite ID
>e	M		Bit string BIT STRING (16)	
>t _{oa}	M		Bit string BIT STRING (8)	
>δ _i	M		Bit string BIT STRING (16)	
>OMEGADOT	M		Bit string BIT STRING (16)	
>SV Health	M		Bit string BIT STRING (8)	
>A ^{1/2}	M		Bit string BIT STRING (24)	
>OMEGA ₀	M		Bit string BIT STRING (24)	
>M ₀	M		Bit string BIT STRING (24)	
>ω	M		Bit string BIT STRING (24)	
>af ₀	M		Bit string BIT STRING (11)	
>af ₁	M		Bit string BIT STRING (11)	
SV Global Health	O		Bit string BIT STRING (364)	

Range Bound	Explanation
maxNoSat MaxNoSat	Maximum number of satellites for which information can be provided

9.2.1.31G GPS Receiver Geographical Position (GPS RX Pos)

The GPS Receiver Geographical Position is used to identify the geographical coordinates of a GPS receiver relevant for a certain Information Exchange Object.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Latitude Sign	M		ENUMERATED (North, South)	
Degrees of Latitude	M		INTEGER (0..2 ²³ -1)	The IE value (N) is derived by this formula: N ≤ 2 ²³ X / 90 < N+1 X being the latitude in degree (0°.. 90°)
Degrees of Longitude	M		INTEGER (-2 ²³ ..2 ²³ -1)	The IE value (N) is derived by this formula: N ≤ 2 ²⁴ X / 360 < N+1 X being the longitude in degree (-180°..+180°)
Direction of Altitude	M		ENUMERATED (Height, Depth)	
Altitude	M		INTEGER (0..2 ¹⁵ -1)	The relation between the value (N) and the altitude (a) in meters it describes is N ≤ a < N+1, except for N=2 ¹⁵ -1 for which the range is extended to include all greater values of (a).

9.2.1.31H HS-DSCH Information to modify

The HS-DSCH Information to modify provides information for HS-DSCH to be modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flow Specific Information		0..<Mmax noofMACd Flows>		
>HS-DSCH MAC-d Flow ID	M		9.2.131I	
>BLER	O		9.2.1.4A	
>Allocation/Retention Priority	O		9.2.1.1A	
>Priority Queue Information		0..<Mmax noofPrioQueues>		
>>Priority Queue ID	M		9.2.1.49C	
>>Scheduling Priority Indicator	O		9.2.1.53H	
>>>MAC-d PDU Size Index		0..<Mmax noofMACd PDUindexes>		
>>>SID	M		9.2.1.53I	
>>>MAC-d PDU Size	O		9.2.1.38A	
>Transport Bearer Request Indicator	M		9.2.1.62A	
Measurement Reporting Cycle	O		ENUMERATED (k1, k2)	For FDD only

9.2.1.31I HS-DSCH MAC-d Flow ID

HS-DSCH MAC-d Flow ID is the unique identifier for one MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flow ID			INTEGER (0..7)	

9.2.1.31J HS-DSCH RNTI

The HS-DSCH RNTI is used for the UE-specific CRC in HS-SCCH and HS-DSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH RNTI			INTEGER (0..65535)	

9.2.1.32 IB_SG_DATA

Segment as defined in ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_DATA			Bit String BIT STRING	Contains "SIB data fixed" or "SIB data variable" in segment as encoded in ref. [18].

9.2.1.33 IB_SG_POS

The lowest position of a specific Information Block segment in the SFN cycle ($IB_SG_POS < IB_SG_REP$).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_POS			INTEGER (0..4094)	Only even positions <u>are</u> allowed. See ref. [18]

9.2.1.34 IB_SG_REP

Repetition distance for an Information Block segment. The segment shall be transmitted when $SFN \bmod IB_SG_REP = IB_SG_POS$.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_REP			ENUMERATED (4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096)	Repetition period for the IB segment in frames

9.2.1.35 IB Type

The IB Type identifies a specific system information block.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB Type			Enumerated ENUMERATED (MIB, SB1, SB2, SIB1, SIB2, SIB3, SIB4, SIB5, SIB6, SIB7, SIB8, SIB9, SIB10, SIB11, SIB12, SIB13, SIB13.1, SIB13.2, SIB13.3, SIB13.4, SIB14, SIB15, SIB15.1, SIB15.2, SIB15.3, SIB16, ..., SIB17, SIB15.4, SIB18)	

9.2.1.36 Indication Type

The indication type shall indicate the category of a failure with respect to its impact on the logical resources supported at the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Indication Type			ENUMERATED (No-Failure, Service-Impacting, ...)	Service-Impacting – The failure has impacted on the logical resources supported at the Node B.

Void.

9.2.1.36A Information Exchange Object Type

The Information Exchange Object type indicates the type of object that the requested information shall be valid for.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Information Exchange Object Type			ENUMERATED (Cell, ...)	

Void.

9.2.1.36B Information Report Characteristics

The information report characteristics defines how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Information Report Characteristics Type</i>				
->>On_Demand			NULL	
->>Periodic				
>>Information Report Periodicity	M		ENUMERATED (1min...1hr,...) step 1min, (1hr...24hr,...) step 1hr, ...	The frequency with which the Node B shall send information reports.
>>CHOICE <i>Information Report Periodicity Scale</i>	M			The frequency with which the Node B shall send information reports.
>>>minute				
>>>>Report Periodicity Value	M		INTEGER (1..60,...)	Unit: min
>>>hour				
>>>>Report Periodicity Value	M		INTEGER (1..24,...)	Unit: h
->>On Modification				
>>Information Threshold	O		9.2.1.36E	

9.2.1.36C Information Exchange ID

The Information Exchange ID uniquely identifies any requested information per Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Information Exchange ID	M		INTEGER (0..2^20-1)	

9.2.1.36D Information Type

The Information Type indicates which kind of information the Node B shall provide.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Information Type Item	M		ENUMERATED_ (GPS Information, DGPS Corrections, GPS RX Pos, ...)	
GPS Information	C-GPS	0..<Mmax NoGPSItems>		
>GPS Information Item			ENUMERATED_ (GPS Navigation Model & Time Recovery, GPS Ionospheric Model, GPS UTC Model, GPS Almanac, GPS Real-Time Integrity, ...)	

Condition	Explanation
GPS	The IE shall be present if the <i>Information Type Item</i> IE indicates "GPS Information".

Range Bound	Explanation
maxNoGPSItems MaxNoGPSItems	Maximum number of GPS Information Items supported in one Information Exchange

9.2.1.36E Information Threshold

The Information Threshold indicates which kind of information shall trigger the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Information Type Item</i>	M			
->DGPS				
->>PRC Deviation	M		ENUMERATED (1, 2, 5, 10, ...)	PRC deviation in meters from the previously reported value, which shall trigger a report

9.2.1.36F IPDL Indicator

Indicates if IPDL periods shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IPDL Indicator			ENUMERATED_(active, inactive)	

9.2.1.37 Limited Power Increase

Void.

9.2.1.37A Local Cell Group ID

The Local Cell Group ID represents resources in the Node B, which have been pooled from a capacity point of view.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Local Cell Group ID			Local Cell ID 9.2.1.38	

9.2.1.38 Local Cell ID

The local cell ID represents resources in the Node B that can be used for the configuration of a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Local Cell ID			INTEGER (0...268435455)	

9.2.1.38A MAC-d PDU Size

The *MAC-d PDU Size* provides the size in bits of the MAC-d PDU.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-d PDU Size			INTEGER (1..5000,...)	

9.2.1.39 Maximum DL Power Capability

This parameter indicates the maximum DL power capability for a local cell or a Power Local Cell Group within the Node B. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum DL Power Capability			ENUMERATED INTEGER (0...500)	Unit: dBm; Range: 0..50 dBm StepGranularity: 0.1 dB 0: 0 dBm 1: 0.1 dBm ... 499: 49.9 dBm 500: 50.0 dBm

9.2.1.40 Maximum Transmission Power

The Maximum Transmission Power is the maximum power for all downlink channels added together, that is allowed to be used simultaneously in a cell. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Transmission Power			ENUMERATED INTEGER (0...500)	Unit: dBm Range: 0..50 StepGranularity: 0.1 dB 0: 0 dBm 1: 0.1 dBm ... 499: 49.9 dBm 500: 50.0 dBm

9.2.1.40A Measurement Availability Indicator

Indicates if the measurement is available or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Availability Indicator			ENUMERATED (measurement available, measurement not available)	

Void.

9.2.1.40B Measurement Change Time

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Scale				
>millisecond				
>>Measurement Change Time Value	M		INTEGER (1..6000,...)	Unit: ms Range: 10..60000 ms Step: 10 ms

9.2.1.41 Measurement Filter Coefficient

The Measurement Filter Coefficient determines the amount of filtering to be applied for measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Filter Coefficient			ENUMERATED (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 17, 19,...)	

9.2.1.41A Measurement Hysteresis Time

The Measurement Hysteresis Time provides the duration during which a reporting criterion has to be fulfilled for the Measurement Reporting procedure to be triggered.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Scale				
>millisecond				
>>Measurement Hysteresis Time Value	M		INTEGER (1..6000,...)	Unit: ms Range: 10..60000 ms Step: 10 ms

9.2.1.42 Measurement ID

The Measurement ID uniquely identifies any measurement per (Node B- or eCCommunication) eControl pPort.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement ID			Integer INTEGER (0..-2^20-1)	

9.2.1.43 Measurement Increase/Decrease Threshold

The Measurement Increase/Decrease Threshold defines the threshold that shall trigger Event C or D.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Measurement Increase/Decrease Threshold</i>				
->> <i>Received Total Wide Band Power</i>				
>>Received t Total w Wide b Band p Power	M		INTEGER_(0..620)	Unit: dB Range: 0..62 dB Step: 0.1 0: 0 dB 1: 0.1 dB 2: 0.2 dB ... 620: 62dB
->> <i>Transmitted Carrier Power</i>				
>>Transmitted Carrier Power	M		INTEGER_(0..100)	According to mapping in [22] and [23]
->> <i>Acknowledged PRACH Preambles</i>				FDD only
>>Acknowledged PRACH Preambles	M		INTEGER (0..240,...)	According to mapping in [22]
->> <i>UL Timeslot ISCP</i>				TDD only
>>UL Timeslot ISCP	M		INTEGER_(0..126)	Unit: dB Range: 0..63 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 126: 63 dB, [TDD only]
->> <i>SIR</i>				
>>SIR	M		INTEGER_(0..62)	Unit: dB Range: 0..31 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 62: 31dB
->> <i>SIR Error</i>				FDD only
>>SIR Error	M		INTEGER_(0..124)	Unit: dB Range: 0..62 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 124: 62 dB
->> <i>Transmitted Code Power</i>				
>>Transmitted Code Power	M		INTEGER (0..112,...)	Unit: dB Range: 0..56 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 112: 56 dB
->> <i>RSCP</i>				TDD only
>>RSCP	M		INTEGER_(0..126)	Unit: dB Range: 0..63 dB Step: 0.5 0: 0 dB 1: 0.5 dB 2: 1 dB ... 126: 63 dB
->> <i>Round Trip Time</i>				FDD only
>>Round Trip Time	M		INTEGER_(0..32766)	Unit: chips Range: 0 .. 2047.875 chips Step: 0.625 0: 0 chips 1: 0.0625 chips 2: 0.1250 chips ...

				32766: 2047.875 chips
<i>->>Acknowledged PCPCH Access Preambles</i>				FDD only
>>Acknowledged PCPCH Access Preambles	M		INTEGER_(0..15,...)	According to mapping in [22]
<i>->>Detected PCPCH Access Preambles</i>				FDD only
>>Detected PCPCH Access Preambles	M		INTEGER (0..240,...)	According to mapping in [22]

9.2.1.44 Measurement Threshold

The Measurement Threshold defines which threshold that shall trigger Event A, B, E, F or On Modification.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE <i>Measurement Threshold</i>					☐	
>>Received Total Wide Band Power					☐	
>>Received Total Wide Band Power	M		INTEGER (0..621)	According to mapping in [22] and [23]	☐	
>>Transmitted Carrier Power					☐	
>>Transmitted Carrier Power	M		INTEGER (0..100)	According to mapping in [22] and [23]	☐	
>>Acknowledged PRACH Preambles				FDD only	☐	
>>Acknowledged PRACH Preambles	M		INTEGER (0..240,...)	According to mapping in [22]	☐	
>>UL Timeslot ISCP				TDD only	☐	
>>UL Timeslot ISCP	M		INTEGER (0..127)	According to mapping in [23]	☐	
>>SIR					☐	
>>SIR	M		INTEGER (0..63)	According to mapping in [22] and [23]	☐	
>>SIR Error				FDD only	☐	
>>SIR Error	M		INTEGER (0..125)	According to mapping in [22]	☐	
>>Transmitted Code Power					☐	
>>Transmitted Code Power	M		INTEGER (0..127)	According to mapping in [22] and [23]	☐	
>>RSCP				TDD only	☐	
>>RSCP	M		INTEGER (0..127)	According to mapping in [23]	☐	
>>Rx Timing Deviation				Applicable to 3.84Mcps TDD only	☐	
>>Rx Timing Deviation	M		INTEGER (0..8191)	According to mapping in [23]	☐	
>>Round Trip Time				FDD only	☐	
>>Round Trip Time	M		INTEGER (0..32767)	According to mapping in [22]	☐	
>>Acknowledged PCPCH Access Preambles				FDD only	☐	
>>Acknowledged PCPCH Access Preambles	M		INTEGER (0..15,...)	According to mapping in [22]	☐	
>>Detected PCPCH Access Preambles				FDD only	☐	
>>Detected PCPCH Access Preambles	M		INTEGER (0..240,...)	According to mapping in [22]	☐	
>Additional Measurement Thresholds					☐	
>>>UTRAN GPS Timing of Cell Frames for LCSUE Positioning					☐	
>>>T _{UTRAN-GPS} Measurement Threshold Information	M		9.2.1.64B		YES	reject
>>>SFN-SFN Observed Time Difference					☐	
>>>SFN-SFN Measurement	M		9.2.1.53C		YES	reject

Threshold Information						
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9.2.1.45 Message Discriminator

This field is used to discriminate between Dedicated NBAP and Common NBAP messages.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Message Discriminator			ENUMERATED_ (Common, Dedicated)	

9.2.1.45A Message Structure

The *Message Structure* IE gives information for each level with assigned criticality in an hierarchical message structure from top level down to the lowest level above the reported level for the occurred error (reported in the *Information Element Criticality Diagnostics* IE).

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message-structure		1 to <maxnooff levels>		The first repetition of the <i>Message Structure</i> IE corresponds to the top-level of the message. The last repetition of the <i>Message Structure</i> IE corresponds to the level above the reported level for the occurred error of the message.	GLOBAL	ignore
>IE-ID	M		INTEGER (0..65535)	The IE-ID of this level's IE containing the not understood or missing IE.	!	
>Repetition-Number	O		INTEGER (1..256)	The <i>Repetition Number</i> IE gives, if applicable, the number of occurrences of this level's reported IE up to and including the occurrence containing the not understood or missing IE. Note: All the counted occurrences of the reported IE must have the same topdown hierarchical message structure of IEs with assigned criticality above them.	!	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Message Structure		1..<maxnooflevels>		The first repetition of the Message Structure IE corresponds to the top level of the message. The last repetition of the Message Structure IE corresponds to the level above the reported level for the occurred error of the message.
>IE ID	M		INTEGER (0..65535)	The IE ID of this level's IE containing the not understood or missing IE.
>Repetition Number	O		INTEGER (1..256)	The Repetition Number IE gives, if applicable, the number of occurrences of this level's reported IE up to and including the occurrence containing the not understood or missing IE. Note: All the counted occurrences of the reported IE must have the same topdown hierachical message structure of IEs with assigned criticality above them.

Range bBound	Explanation
maxnooflevels/maxnooflevels	Maximum no-number of message levels to report. The value for maxnooflevels is 256.

9.2.1.46 Message Type

The Message Type uniquely identifies the message being sent.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Procedure ID	M	14		
>Procedure Code	M		INTEGER (0..255)ENUMERATED { COMMON TRANSPORT CHANNEL SETUP, COMMON TRANSPORT CHANNEL RECONFIGURATION, COMMON TRANSPORT CHANNEL DELETION, BLOCK RESOURCE, UNBLOCK RESOURCE, AUDIT REQUIRED, AUDIT, COMMON MEASUREMENT INITIATION, COMMON MEASUREMENT REPORTING, COMMON MEASUREMENT TERMINATION, COMMON MEASUREMENT FAILURE, CELL SETUP, CELL RECONFIGURATION, CELL DELETION, RESOURCE STATUS INDICATION, SYSTEM INFORMATION UPDATE, RL SETUP, RL ADDITION, SYNCHRONISED RL RECONFIGURATION PREPARATION, SYNCHRONISED RL RECONFIGURATION COMMIT, SYNCHRONISED RL RECONFIGURATION CANCELLATION, UNSYNCHRONISED RL RECONFIGURATION	"0" = Audit "1" = Audit Required "2" = Block Resource "3" = Cell Deletion "4" = Cell Reconfiguration "5" = Cell Setup "6" = Common Measurement Failure "7" = Common Measurement Initiation "8" = Common Measurement Report "9" = Common Measurement Termination "10" = Common Transport Channel Deletion "11" = Common Transport Channel Reconfigure "12" = Common Transport Channel Setup "13" = Reset "14" = Compressed Mode Command "16" = Dedicated Measurement Failure "17" = Dedicated Measurement Initiation "18" = Dedicated Measurement Report "19" = Dedicated Measurement Termination "20" = Downlink Power Control "21" = Error Indication (For Dedicated Procedures) "23" = Radio Link Addition "24" = Radio Link Deletion "25" = Radio Link Failure "26" = Radio Link Restoration "27" = Radio Link Setup "28" = Resource Status Indication "29" = Synchronised Radio Link Reconfiguration Cancellation "30" = Synchronised Radio Link Reconfiguration Commit "31" = Synchronised Radio Link Reconfiguration Preparation "32" = System Information Update "33" = Unblock Resource "34" = Unsynchornised Radio Link Reconfiguration "35" = Error Indication (For Common Procedures) "37" = Physical Shared Channel Reconfiguration "38" = Downlink Power Timeslot Control "39" = Radio Link Preemption "40" = Information Exchange Failure "41" = Information Exchange Initiation "42" = Information Exchange Termination "43" = Information Reporting "44" = Cell Synchronisation Adjustment "45" = Cell Synchronisation Initiation "46" = Cell Synchronisation Reconfiguration "47" = Cell Synchronisation Reporting "48" = Cell Synchronisation Termination "49" = Cell Synchronisation Failure "50" = Bearer Rearrangement "51" = Radio Link Activation

			<p>ION, RL DELETION, DL POWER CONTROL, DL POWER CONTROL, TIMESLOT DEDICATED MEASUREMENT INITIATION, DEDICATED MEASUREMENT REPORTING, DEDICATED MEASUREMENT TERMINATION, DEDICATED MEASUREMENT FAILURE, RL FAILURE, RL RESTORATION, COMPRESSED MODE COMMAND, ERROR INDICATION, PHYSICAL SHARED CHANNEL RECONFIGURATION, RESET, ... INFORMATION EXCHANGE INITIATION, INFORMATION REPORTING, INFORMATION EXCHANGE TERMINATION, INFORMATION EXCHANGE FAILURE, CELL SYNCHRONISATION INITIATION, CELL SYNCHRONISATION RECONFIGURATION, CELL SYNCHRONISATION REPORTING, CELL SYNCHRONISATION TERMINATION, CELL SYNCHRONISATION FAILURE, CELL SYNCHRONISATION ADJUSTMENT)</p>	
>Ddmode	M		ENUMERATED (Common = common to FDD and TDD.

			FDD, TDD, FDD, Common, ...)	
Type of Message	M		ENUMERATED (Initiating Message, Successful Outcome, Unsuccessful Outcome, Outcome)	

9.2.1.46A Minimum DL Power Capability

This parameter indicates the minimum DL power capability for a local cell within the Node B. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum DL Power Capability			ENUMERATED INTEGER (0..800)	Unit: dBm; Range: -30 .. +50 dBm Stepgranularity: 0.1 dB 0: -30.0 dBm 1: -29.9 dBm ... 799: 49.9 dBm 800: 50.0 dBm

9.2.1.47 Minimum Spreading Factor

This parameter indicates the minimum spreading factor supported at a cell within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum Spreading Factor			Enumerated ENUMERATED (4, 8, 16, 32, 64, 128, 256, 512)	

9.2.1.47A N_INSYNC_IND

This parameter defines the number of successive in-sync indications after which is used by the Node B for achievement/re-achievement of UL synchronisation on the Uu interface as defined in shall trigger the Radio Link Restore procedure (see also ref. [10] and [21]).

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_INSYNC_IND			Integer INTEGER (1, 2.., 256)	

9.2.1.47B N_OUTSYNC_IND

This parameter defines the number of consecutive out-of-sync indications after which the timer T_RLFAILURE shall be started (see also ref. [10] and [21]).

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_OUTSYNC_IND			Integer-INTEGER (1, 2, ..., 256)	

9.2.1.47C Neighbouring FDD Cell Measurement Information

This IE provides information on the FDD neighbouring cells used for the purpose of measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UC-Id	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nd [14]
Primary Scrambling Code	M		9.2.2.34	

9.2.1.47D Neighbouring TDD Cell Measurement Information

This IE provides information on the 3.84Mcps TDD neighbouring cells used for the purpose of measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UC-Id	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nt [15]
Cell Parameter ID	M		9.2.3.4	
Time slot	O		9.2.3.23	
Midamble sShift aAnd bBurst Type	O		9.2.3.7	

9.2.1.47E Neighbouring TDD Cell Measurement Information LCR

This IE provides information on the neighbouring 1.28Mcps TDD cells used for the purpose of measurements. Since the measurement can be performed on every time slot and midamble shift, the *Time sSlot LCR* IE and *Midamble sShift LCR* IE shall be included if available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UC-Id	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nt [15]
Cell Parameter ID	M		9.2.3.4	
Time Slot LCR	O		9.2.3.24A	
Midamble shift LCR	O		9.2.3.7A	

9.2.1.48 Node B Communication Context ID

The Node B Communication Context ID is the identifier of the Communication Context in the Node B, it corresponds to the dedicated resources which are necessary for an UE using one or more dedicated channels in a given Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Node B Communication Context ID			INTEGER (0..2 ²⁰ -1)	"2 ²⁰ -1" is a reserved value to indicate all the existing and future Node B eCommunication eContexts that can be reached by the eCommunication eControl pPort (All NBCC).

9.2.1.49 Payload CRC Presence Indicator

This parameter indicates whether FP payload 16 bit CRC is used or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Payload CRC Presence Indicator			ENUMERATED (CRC Included, CRC Not Included)	

9.2.1.49A PICH Power

The *PICH Power* IE indicates a power level relative to the [FDD - Primary CPICH power] [TDD - Primary CCPCH power] configured in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PICH Power			Enumerated INTEGER (-10..+5dB)	Unit: dB Range: -10 .. +5 dB Step: 1dB

9.2.1.49B Power Local Cell Group ID

The Power Local Cell Group ID represents resources in the Node B which have been pooled from a DL power capability point of view.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Local Cell Group ID			Local Cell ID 9.2.1.38	

9.2.1.49C Priority Queue ID

The Priority Queue ID provides the identity of the Priority Queue.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Priority Queue ID			INTEGER (0..7)	

9.2.1.50 Puncture Limit

The Puncture Limit limits the amount of puncturing that can be applied in order to minimise the number of dedicated physical channels.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Puncture Limit			INTEGER (0..15)	Unit: % Range: 40..100 % Step: 4 0-40% 1: 44 % ... 14: 96% 15: 100% means (no puncturing)

9.2.1.50A QE-Selector

The QE-Selector indicates from which source the value for the quality estimate (QE) shall be taken.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
QE-Selector			ENUMERATED_ Selected, Non-Selected)	

9.2.1.51 Report Characteristics

The report characteristics, defines how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Report Characteristics					■	
>>On_Demand			NULL		■	
>>Periodic					■	
>>Report Periodicity	M		9.2.1.51aENUMERATED (10ms...1min,...) step 10ms, (1min...1hr,...) step 1min,...	The frequency with which the Node B shall send measurement reports.	■	
>>Event A					■	
>>Measurement Threshold	M		Measurement Threshold 9.2.1.44	The threshold for which the Node B shall trigger a measurement report.	■	
>>Measurement Hysteresis Time	O		9.2.1.41aENUMERATED (10ms...1min,...) step 10ms,...		■	
>>Event B					■	
>>Measurement Threshold	M		Measurement Threshold 9.2.1.44	The threshold for which the Node B shall trigger a measurement report.	■	
>>Measurement Hysteresis Time	O		9.2.1.41aENUMERATED (10ms...1min,...) step 10ms,...		■	
>>Event C					■	
>>Measurement Increase/Decrease Threshold	M		Measurement Increase/Decrease Threshold 9.2.1.43		■	
>>Measurement Change Time	M		9.2.1.40bENUMERATED (10ms...1min,...) step 10ms,...	The time the measurement entity shall rise on (in ms), in order to trigger a measurement report.	■	
>>Event D					■	
>>Measurement Increase/Decrease Threshold	M		Measurement Increase/Decrease Threshold 9.2.1.43		■	
>>Measurement Change Time	M		9.2.1.40bENUMERATED (10ms...1min,...) step 10ms,...	The time the measurement entity shall fall (in ms), in order to trigger a measurement report.	■	
>>Event E					■	
>>Measurement Threshold 1	M		Measurement Threshold 9.2.1.44		■	
>>Measurement Threshold 2	O		Measurement Threshold 9.2.1.44		■	
>>Measurement Hysteresis Time	O		9.2.1.41aENUMERATED (10ms...1min,...) step 10ms,...	The hysteresis time in ms	■	
>>Report	O		9.2.1.51aENUMERATED	The frequency with	■	

Periodicity			MERATED (10ms...1min, ...) step 10ms, (1min...1hr,...) step 1min,...	which the Node B shall send measurement reports.		
>>Event F						
>>Measurement Threshold 1	M		Measurement Threshold 9.2.1.44			
>>Measurement Threshold 2	O		Measurement Threshold 9.2.1.44			
>>Measurement Hysteresis Time	O		9.2.1.41aENU MERATED (10ms...1min, ...) step 10ms,...	The hysteresis time in ms		
>>Report Periodicity	O		9.2.1.51aENU MERATED (10ms...1min, ...) step 10ms, (1min...1hr,...) step 1min,...	The frequency with which the Node B shall send measurement reports.		
>Additional Report Characteristics						
>>>On Modification						
>>>On Modification		1			YES	reject
>>>Measurement Threshold	M		Measurement Threshold 9.2.1.44			

9.2.1.51a Report Periodicity

The Report Periodicity defines the frequency at which the Node B shall send measurement reports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Report Periodicity Scale				
>millisecond				
>>Report Periodicity Value	M		INTEGER (1..6000,...)	Unit: ms Range: 10..60000 ms Step: 10 ms
>minute				
>>Report Periodicity Value	M		INTEGER (1..60,...)	Unit: min Range: 1..60 min Step: 1 min

9.2.1.51A Requested Data Value

The Requested Data Value IE contains the relevant data concerning the ongoing information exchange. The Requested Data Value IE shall include at least one of the following IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DGPS Corrections	O		9.2.1.24B	
GPS Navigation Model & Time Recovery	O		9.2.1.31B	
GPS Ionospheric Model	O		9.2.1.31C	
GPS UTC Model	O		9.2.1.31D	
GPS Almanac	O		9.2.1.31F	
GPS Real-Time Integrity	O		9.2.1.31E	
GPS RX Pos	O		9.2.1.31G	

9.2.1.51B Requested Data Value Information

The *Requested Data Value Information* IE provides information both on whether or not the Requested Data Value is provided in the message or not and if provided also the Requested Data Value itself. In case of periodic reporting, "*Information Not Available*" shall be used when at least one part of the requested information was not available at the moment of initiating the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Information Availability Indicator</i>	M			
> <i>Information Available</i>				
>>Requested Data Value	M		9.2.1.51A	
> <i>Information Not Available</i>			NULL	

9.2.1.52 Resource Operational State

The *Resource Operational State* is used to indicate the current operational state of the associated resource following a Node B failure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Resource Operational State			ENUMERATED_(Enabled, Disabled)	When a resource is marked as disabled, then its child resources are implicitly disabled. Cell Resource hierarchy can be referred to [6].

9.2.1.52A Retention Priority

Void.

9.2.1.53 RL ID

The RL ID is the unique identifier for one RL associated with a UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL ID			INTEGER (0..31)	

9.2.1.53a RNC-Id

This is the identifier of one RNC in UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
RNC-Id			INTEGER (0..4095)	

9.2.1.53A SFN

System Frame Number of the cell, see ref. [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
SFN			Integer-INTEGER (0..4095)	

9.2.1.53B Segment Type

Segment type as defined in [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Segment Type			Enumerated-ENUMERATED (First segment, First segment short, Subsequent segment, Last segment, Last segment short, Complete SIB, Complete SIB short, ...)	

9.2.1.53C SFN-SFN Measurement Threshold Information

The SFN-SFN Measurement Threshold Information defines the related thresholds SFN-SFN Observed Time Difference measurements which shall trigger the Event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
SFN-SFN Change Limit	O		INTEGER(1..256)	Change of SFN-SFN value compared to previously reported value, which shall trigger a new report. Unit: in 1/16 chip. Step: 1/16 chip
Predicted SFN-SFN Deviation Limit	O		INTEGER(1..256)	Deviation of the predicted SFN-SFN from the latest measurement result, which shall trigger a new report. Unit: in 1/16 chip. Step: 1/16 chip

9.2.1.53D SFN-SFN Measurement Time Stamp

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Mode				
>FDD				
>>SFN	M		9.2.1.53A	Indicates the SFN of the reference cell at which the measurement has been performed.
>TDD				
>>SFN	M		9.2.1.53A	Indicates the SFN of the reference cell at which the measurement has been performed.
>>Time Slot	M		9.2.3.23	Indicates the Time Slot of the reference cell at which this measurement has been performed.

9.2.1.53E SFN-SFN Measurement Value Information

The *SFN-SFN Measurement Value Information* IE indicates the measurement result related to SFN-SFN Observed Time Difference measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information		1..<maxno MeasNCell> >1..<maxno MeasNCell>		
>UC-Id	M		9.2.1.65B	
>SFN-SFN Value	M		9.2.1.53F	
>SFN-SFN Quality	O		INTEGER_(0..256)	Indicates the standard deviation of the SFN-SFN Observed Time Difference measurements in 1/16 chip.
>SFN-SFN Drift Rate	M		INTEGER (-100..+100)	Indicates the SFN-SFN drift rate in 1/256 chip per second. A positive value indicates that the Reference cell clock is running at a greater frequency than the measured neighbouring cell.
>SFN-SFN Drift Rate Quality	M		INTEGER_(0..100)	Indicates the standard deviation of the SFN-SFN drift rate measurements in 1/256 chip per second.
->SFN-SFN Measurement Time Stamp	M		9.2.1.53D	
Unsuccessful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information		0..<maxno MeasNCell> -1>0..<maxno MeasNCell>		
>UC-Id	M		9.2.1.65B	

Range bBound	Explanation
maxnoMeasNCell	Maximum number of neighbouring cells that can be measured on.

9.2.1.53F SFN-SFN Value

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
CHOICE Mode				
>FDD>FDD				
>>SFN-SFN	M		INTEGER_(0..614399)	According to mapping in [22].
>TDD>TDD				
>>SFN-SFN	M		INTEGER_(0..40961)	According to mapping in [23].

9.2.1.53G RL Specific DCH Information

The *RL Specific DCH Information* IE provides RL specific DCH Information for DCHs. In the case of a set of co-ordinated DCHs requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE shall be included only for one of the DCHs in the set of co-ordinated DCHs.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
RL sSpecific DCH Information		1..<maxno ofDCHs>		
>DCH ID	M		9.2.1.20	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.

Range bBound	Explanation
maxnoofDCHsMaxnoofDCHs	Maximum number of DCHs for one UE.

9.2.1.53H Scheduling Priority Indicator

Indicates the relative priority of the HS-DSCH data frame. Used by the Node B when scheduling HS-DSCH.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
Scheduling Priority Indicator			INTEGER (0..15)	Relative priority of the HS-DSCH data frame: "0" =Lowest Priority ... "15" =Highest Priority

9.2.1.53I SID

The *SID* IE provides the identity of the Size Index.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
SID			INTEGER (0..7)	

9.2.1.54 SIB Deletion Indicator

Void.

9.2.1.55 SIB Originator

Indicates if the Node B shall fill in the SIB information or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SIB Originator			Enumerated ENUMERATED RATED (Node B, CRNC, ...)	

9.2.1.55A Signalling Bearer Request Indicator

The *Signalling Bearer Request Indicator* IE indicates if a new signalling bearer needs to be established for the control of Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Signalling Bearer Request Indicator			ENUMERATED (Bearer Requested)	

9.2.1.56 Shutdown Timer

The shutdown timer shall indicate the length of time available to the CRNC to perform the block of a resource when a Normal priority block is requested.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Shutdown Timer			INTEGER (1..3600); INTEGER(1..3600)	Unit: Value in seconds

9.2.1.56A T_RLFAILURE

The Radio Link Failure procedure shall be triggered after a period of time T_RLFAILURE has elapsed with a persisting out-of-sync indication (see also ref. [10] and [21]).

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T_RLFAILURE			ENUMERATED INTEGER (0, 0.1, 0.2, ..., 25.5)	Unit: in seconds Range: 0 .. 25.5 s Step: 0.1 s

9.2.1.56B Start Of Audit Sequence Indicator

Indicates if the AUDIT REQUEST message initiates a new audit sequence or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Start Of Audit Sequence Indicator			ENUMERATED_ (Start Of Audit Sequence, Not Start Of Audit Sequence)	

9.2.1.56C TFCI2 Bearer Request Indicator

TFCI2 Bearer Request Indicator IE indicates if a new transport bearer on which the DSCH TFCI Signaling control frames shall be received is required.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
TFCI2 Bearer Request Indicator			ENUMERATED (New Bearer Requested)	

9.2.1.57 TFCI Presence

The TFCI Presence parameter indicates whether the TFCI shall be included. In TDD, if it is present in the timeslot, it will be included within the first Channelization code listed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
TFCI presence			ENUMERATED (Present, Not Present)	

9.2.1.58 TFCS (Transport Format Combination Set)

The Transport Format Combination Set is defined as a set of Transport Format Combinations on a Coded Composite Transport Channel. It is the allowed Transport Format Combinations of the corresponding Transport Channels. The DL Transport Format Combination Set is applicable for DL Transport Channels.

[FDD - Where the UE is assigned access to one or more DSCH transport channels then the UTRAN has the choice of two methods for signalling the mapping between TFCI(field 2) values and the corresponding TFC:

Method #1 - TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given transport format combination (value of CTFC(field2)). The CTFC(field2) value specified in the first group applies for all values of TFCI(field 2) between 0 and the specified 'Max TFCI(field2) value'. The CTFC(field2) value specified in the second group applies for all values of TFCI(field 2) between the 'Max TFCI(field2) value' specified in the last group plus one and the specified 'Max TFCI(field2) value' in the second group. – The process continues in the same way for the following groups with the TFCI(field 2) value used by the UE in constructing its mapping table starting at the largest value reached in the previous group plus one.

Method #2 - Explicit

The mapping between TFCI(field 2) value and CTFC(field2) is spelt out explicitly for each value of TFCI (field2)]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
CHOICE DSCH >No split in TFCI				This choice is made if : a) The TFCS refers to the Uplink. OR b) The mode is FDD and none of the Radio Links of the concerned UE are assigned any DSCH transport channels. OR c) The mode is TDD.
>>TFCS		1..<maxno ofTFCs>+1 to <maxno of TFCs>		The first instance of the parameter corresponds to TFCI zero, the second to 1 and so on.
>>>CTFC	M		9.2.1.18AINTEGER (0..MaxCTFC)	See Note 1.
>>>CHOICE Gain Factors	C-PhysChan			
>>>>Signalled Gain Factors				
>>>>CHOICE Mode	M			
>>>>>FDD				
>>>>>Gain Factor β_c	M		Integer-INTEGER (0..15)	For UL DPCCH or control part of PRACH or control part of PCPCH in FDD; mapping in accordance to [9]
>>>>>Gain Factor β_D	M		Integer-INTEGER (0..15)	For UL DPDCH or data part of PRACH or data part of PCPCH in FDD; mapping in accordance to [9]
>>>>>TDD				
>>>>>Gain Factor β	M		Integer-INTEGER (0..15)	For UL DPCH in TDD; mapping in accordance to [20].
>>>>>Reference TFC nr	O		Integer-INTEGER (0..3)	If this TFC is a reference TFC, this IE indicates the reference number.
>>>>>Computed Gain Factors				
>>>>>Reference TFC nr	M		Integer-INTEGER (0..3)	Indicates the reference TFC to be used to calculate the gain factors for this TFC.
>There is a split in the TFCI				This choice is made if : a) The TFCS refers to the Downlink. AND b) The mode is FDD and one of the Radio Links of the concerned UE is assigned one or more DSCH transport channels.
>>>>Transport Format Combination _{DCH}		1..<maxTFCI 1 Combs>+1 to <MaxTFCI 1 Combs>		The first instance of the parameter Transport Format Combination _{DCH} corresponds to TFCI (field 1) = 0, the second to TFCI (field 1) = 1 and so on.
>>>CTFC(field1)	M		9.2.1.18AInteger(0..MaxCTFC)	See Note 1.
>>Choice CHOICE				

<i>Signalling mMethod</i>				
<i>>>>>> TFCI fRange</i>				
<i>>>>>>>> TFC mMapping eOn DSCH</i>			<i>1..<maxNo TFCIGroups>1 to <MaxNoTFCIGroups></i>	
>>>>>Max TFCI(field2) vValue	M		IntegerINTEGER (1..1023)	This is the Maximum value in the range of- TFCI(field2) values for which the specified CTFC(field2) applies
>>>>>CTFC(field2)	M		9.2.1.18AInteger(0..MaxCTFC)	See Note 1.
<i>>>>>>> Explicit</i>				
<i>>>>>>>> Transport fFormat eCombination_ DSCH</i>			<i>1..<maxTFCI_2_Combs>1 to <MaxTFCI_2_Combs></i>	The first instance of the parameter <i>Transport fFormat eCombination_ DSCH</i> corresponds to TFCI (field2) = 0, the second to TFCI (field 2) = 1 and so on.
>>>>>CTFC(field2)	M		9.2.1.18AInteger(0..MaxCTFC)	See Note 1.

Condition	Explanation
PhysChan	The IE shall be present if the TFCS concerns a UL DPCH or PRACH channel [FDD – or PCPCH channel].

Range bBound	Explanation
<i>maxnoofTFCsMaxnoofTFCs</i>	The maximum number of Transport Format Combinations.
<i>maxTFCI_1_CombsMaxTFCI_1_Combs</i>	Maximum number of TFCI (field 1) combinations (given by 2 raised to the power of the length of the TFCI (field 1))
<i>maxTFCI_2_CombsMaxTFCI_2_Combs</i>	Maximum number of TFCI (field 2) combinations (given by 2 raised to the power of the length of the TFCI (field 2))
<i>maxNoTFCIGroupsMaxNoTFCIGroups</i>	Maximum number of groups, each group described in terms of a range of TFCI(field 2) values for which a single value of CTFC(field2) applies
MaxCTFC	Maximum number of the CTFC value is calculated according to the following: $\sum_{i=1}^L (L_i - 1) P_i$ with the notation according to ref. [18]

Note 1:

The CTFC is an integer number calculated in accordance with [18], subclause 14.10. Regarding the channel ordering, for all transport channels, ‘TrCH1’ corresponds to the transport channel having the lowest transport channel identity among all configured transport channels on this CCTrCH. ‘TrCH2’ corresponds to the transport channel having the next lowest transport channel identity, and so on.

9.2.1.59 Transport Format Set

The Transport Format Set is defined as the set of Transport Formats associated to a Transport Channel, e.g. DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Dynamic Transport Format Information		$1..<maxTFcount>4$ to $<maxTFcount>$		The first instance of the parameter corresponds to TFI zero, the second to 1 and so on.
>Number of Transport Blocks	M		INTEGER (0..512)	
>Transport Block Size	C- Blocks		INTEGER (0..5000)	Unit: Bits
>CHOICE Mode	M			
>>>> TDD				
>>>>> Transmission Time Interval Information	C-TTIdynamic	$1..<maxTTIcount>4$ to $<maxTTIcount>$		
>>>> Transmission Time Interval	M		Enumerated ENUMERATED RATED (10, 20, 40, 80,...)	Unit: ms
Semi-Static Transport Format Information		1		
>Transmission Time Interval	M		ENUMERATED (10, 20, 40, 80, dynamic,...,5)	Unit: ms; Value "dynamic" for TDD only; Value "5" for LCR TDD only
>Type Of Channel Coding	M		ENUMERATED_ (No codingTDD, Convolutional, Turbo, ...)	[FDD - The value "No codingTDD" shall be treated as logical error if received]
>Coding Rate	C- Coding		ENUMERATED (1/2, 1/3,...)	
>Rate Matching Attribute	M		INTEGER (1..maxRM)	
>CRC Size	M		ENUMERATED (0, 8, 12, 16, 24,...)	
>CHOICE Mode	M			
>>>> TDD				
>>> 2 nd Interleaving Mode	M		Enumerated ENUMERATED RATED_ (Frame related, Timeslot related, ...)	

Condition	Explanation
Blocks	The IE shall be present if the <i>Number Of Transport Blocks</i> IE is set to a value greater than 0.
Coding	The IE shall be present if the <i>Type Of Channel Coding</i> IE is set to "Convolutional" or "Turbo".
-TTIdynamic	The IE shall be present if the <i>Transmission Time Interval</i> IE in the <i>Semi-Static Transport Format Information</i> IE is set to "dynamic".

Range Bound	Explanation
$maxTFcount$ / $MaxTFcount$	Maximum number of different <i>Transport Formats</i> that can be included in the <i>Transport Format Set</i> for one transport channel.
$MmaxRM$	Maximum number that could be set as rate matching attribute for a transport channel.
$MmaxTTIcount$	The amount of different <i>TTIs</i> that are possible for that <i>Transport Format</i> .

9.2.1.60 ToAWE

TOAWE is the window endpoint. DL data frames are expected to be received before this window endpoint. TOAWE is defined with a positive value relative Latest Time of Arrival (LTOA). A data frame arriving after TOAWE gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWE			INTEGER (0..2559)	Unit: ms.

9.2.1.61 ToAWS

TOAWS is the window startpoint. DL data frames are expected to be received after this window startpoint. TOAWS is defined with a positive value relative Time of Arrival Window Endpoint (TOAWE). A data frame arriving before TOAWS gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWS			INTEGER (0..1279)	Unit: ms.

9.2.1.62 Transaction ID

The transaction ID is used to associate all the messages belonging to the same procedure. Messages belonging to the same procedure shall use the same transaction ID.

The transaction ID is determined by the initiating peer of a procedure. For common procedures the transaction ID shall uniquely identify a procedure within all ongoing parallel procedures initiated by one protocol peer, using the same procedure code and signalled over the same Node B eControl pPort. For dedicated procedures the transaction ID shall uniquely identify a procedure within all ongoing parallel procedures initiated by one protocol peer, using the same procedure code and initiated towards the same Node B/CRNC context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Transaction ID Length Transaction ID			CHOICE INTEGER(0..127) or INTEGER (0..32767)	The Transaction ID shall be interpreted for its integer value, not for the type of encoding ("short" or "long").
>Short				
>>Transaction ID Value	M		INTEGER (0..127)	
>Long				
>>Transaction ID Value	M		INTEGER (0..32767)	

9.2.1.62A Transport Bearer Request Indicator

Indicates whether a new transport bearer needs to be established for carrying the ~~concerning~~ concerned transport channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Request Indicator			ENUMERATED_(Bearer Requested, Bearer Not Requested, ...)	

9.2.1.63 Transport Layer Address

In case of transport bearer establishment with ALCAP [2][31], this IE contains the address to be used for Transport Network Control Plane signalling to establish the transport bearer according to [2][31].

In order to allow transport bearer establishment without ALCAP, this IE contains the address of the transport bearer to be used for the user plane transport.

For details on the Transport Address used see ref. [2][31].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Layer Address			Bit string BIT STRING (1..160, ...)	

9.2.1.64 TSTD Indicator

Indicates if TSTD shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSTD Indicator			ENUMERATED_ (active, inactive)	

9.2.1.64A T_{UTRAN-GPS} Measurement Value Information

The T_{UTRAN-GPS} *Measurement Value Information* IE indicates the measurement results related to the UTRAN GPS Timing of Cell Frames for **LCSUE Positioning** measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T _{UTRAN-GPS}		14		Indicates the UTRAN GPS Timing of Cell Frames for LCSUE Positioning . According to mapping in [22]. Significant values range from 0 to 37158911999999.
>MS	M		INTEGER (0..16383)	Most Significant Part
>LS	M		INTEGER (0..4294967295)	Least Significant Part
T _{UTRAN-GPS} _Quality	M		INTEGER (0..255)	Indicates the standard deviation of the T _{UTRAN-GPS} measurements in 1/16 chip.
T _{UTRAN-GPS} Drift Rate	M		INTEGER (-50..+50)	Indicates the T _{UTRAN-GPS} drift rate in 1/256 chip per second. A positive value indicates that the UTRAN clock is running at a lower frequency than GPS clock.
T _{UTRAN-GPS} Drift Rate Quality	M		INTEGER (0..50)	Indicates the standard deviation of the T _{UTRAN-GPS} drift rate measurements in 1/256 chip per second.

9.2.1.64B T_{UTRAN-GPS} Measurement Threshold Information

The T_{UTRAN-GPS} *Measurement Threshold Information* defines the related thresholds for **LCS-UE Positioning** measurements shall trigger the event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T _{UTRAN-GPS} Change Limit	O		INTEGER_(1..256)	Change of T _{UTRAN-GPS} value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted T _{UTRAN-GPS} Deviation Limit	O		INTEGER_(1..256)	Deviation of the predicated T _{UTRAN-GPS} from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

9.2.1.64C T_{UTRAN-GPS} Accuracy Class

The ~~T_{UTRAN-GPS} Accuracy Class~~ T_{UTRAN-GPS} Accuracy Class IE indicates the accuracy class of the UTRAN GPS Timing of Cell Frames for LCSUE Positioning measurement.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T _{UTRAN-GPS} Accuracy Class			ENUMERATED_(Accuracy Class A, Accuracy Class B, Accuracy Class C, ...)	More information about T _{UTRAN-GPS} Measurement Accuracy Class is included in [22].

9.2.1.65 UARFCN

Designates the central frequency of the channel number.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
UARFCN			INTEGER (0..16383, ...)	Unit: MHz Range: corresponds to 0..0Hz..-3276.6 MHz Step: 0.2 MHz -(subclause 5.4.3 in [14] and [15])

9.2.1.65A UL Capacity Credit

The capacity credit indicates to the CRNC the Uplink capacity of a Local Cell or a Local Cell Group.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Capacity Credit			INTEGER (0..65535)	

9.2.1.65B UTRAN Cell Identifier (UC-Id)

The UC-Id (UTRAN Cell identifier) is the identifier of a cell in one UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RNC-Id	M		9.2.1.53a	
C-Id	M		9.2.1.9	

9.2.1.66 UL FP Mode

This parameter defines if normal or silent mode of the Frame Protocol shall be used for the UL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
UL FP Mode			ENUMERATED (Normal, Silent, ...)	

9.2.1.67 UL interference level

Void.

9.2.1.67A UL SIR

The UL SIR indicates a received UL SIR.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
UL SIR			ENUMERATED (-8.2...-17.3)	Step 0.1 dB

9.2.2 FDD specific parameters

9.2.2.A Active Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence activation. For details see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
CM Configuration Change CFN	M		CFN 9.2.1.7	
Transmission Gap Pattern Sequence Status		$0..<maxTGPS>$ to $<MaxTGPS>$		
>TGPS Identifier	M		INTEGER (1..<MaxTGPS>)	If the group is not present, none of the pattern sequences are activated. References an already defined sequence.
>TGPRC	M		INTEGER (0..511)	The number of transmission gap patterns within the Transmission Gap Pattern Sequence. "0"=Infinity
>TGCFN	M		CFN 9.2.1.7	Connection Frame Number of the first frame of the first pattern 1 within the Transmission Gap Pattern Sequence.

Range Bound	Explanation
$maxTGPS$ MaxTGPS	Maximum number of active pattern sequences. Value 6.

9.2.2.B Adjustment Period

The *Adjustment Period* IE defines the period to be used for power balancing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Period			INTEGER (1..256)	Unit: Frames

9.2.2.C Adjustment Ratio

The *Adjustment Ratio* IE (*Radj*) defines the convergence rate used for the associated Adjustment Period.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Ratio			INTEGER (0..100)	Unit: None Range: 0..1 Step: 0.01 The Adjustment Ratio is given with a granularity of 0.01 0 -> 0.00 1 -> 0.01 ... 100 -> 1.00

9.2.2.D AICH Power

The *AICH Power* IE indicates a power level (measured as the power per transmitted acquisition indicator when several AIs are transmitted in parallel) relative to the primary CPICH power configured in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AICH Power			INTEGER (-22..+5)	Unit: Offset in dB Range: -22..+5 dB Step: 1 dB

9.2.2.1 AICH Transmission Timing

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AICH Transmission Timing			ENUMERATED (0, 1)	See parameter AICH_Transmission_Timing in ref. [7].

9.2.2.1A AP Preamble Signature

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AP Preamble Signature			INTEGER (0..15)	Described in ref. [9]

9.2.2.1B AP Sub Channel Number

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AP Sub Channel Number			INTEGER (0..11)	Described in ref. [10]

9.2.2.1C CD Sub Channel Numbers

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
CD Sub Channel Numbers			BIT STRING (12)	Each bit indicates availability for a subchannel, where the subchannels are numbered "subchannel 0" to "subchannel 11". The value 1 of a bit indicates that the corresponding subchannel is available and the value 0 indicates that it is not available. The order of bits is to be interpreted according to subclause 9.3.4. See also [10].

9.2.2.1D Channel Assignment Indication

The Channel Assignment Indication indicates whether CA is active or inactive. When CA is active, CPCH is in Versatile Channel Assignment Method (VCAM) mode and when CA is inactive, CPCH is in UE Channel Selection Method (UCSM) mode. In VCAM mode (CA active), CA message in CD/CA-ICH shall be sent.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Channel Assignment Indication			ENUMERATED (CA Active, CA Inactive)	

9.2.2.2 Chip Offset

The Chip Offset is defined as the radio timing offset inside a radio frame. The Chip offset is used as offset for the DL DPCH relative to the Primary CPICH timing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Chip Offset			INTEGER (0..38399)	Unit: Chips

9.2.2.2A Closed Loop Timing Adjustment Mode

Indicates when the phase/amplitude adjustment is performed in the DL in relation to the receipt of the UL feedback command in case of closed loop mode transmit diversity on DPCH.

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Closed Loop Timing Adjustment Mode			ENUMERATED (Offset1, Offset2, ...)	According to ref. [10] subclause 7.1: - "Offset1" = slot(j+1)mod15 - "Offset2" = slot(j+2)mod15

9.2.2.3 Common Channels Capacity Consumption Law

Void

9.2.2.3A Compressed Mode Deactivation Flag

The Compressed Mode Deactivation Flag indicates whether Compressed Mode shall be deactivated or not in the new RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Compressed Mode Deactivation Flag			ENUMERATED_(Deactivate, Maintain Active)	

9.2.2.4 Compressed Mode Method

Void.

9.2.2.4A CPCH Allowed Total Rate

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CPCH Allowed Total Rate			ENUMERATED (15, 30, 60, 120, 240, 480, 960, 1920, 2880, 3840, 4800, 5760,...)	Channel Symbol Rate (Unit: kbps)

9.2.2.4B CPCH Scrambling Code Number

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CPCH Scrambling Code Number			INTEGER (0..79)	Described in ref. [9]

9.2.2.4C CPCH UL DPCCH Slot Format

Indicates the slot format used in UL CPCH message control part, accordingly to ref. [7]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CPCH UL DPCCH Slot Format			INTEGER (0..2,...)	

9.2.2.4D DCH FDD Information

The *DCH FDD Information* IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Descriptions
DCH FDD Information		<i>1..<maxno ofDCHs>1 to <maxno of DCHs></i>		
>Payload CRC Presence Indicator	M		9.2.1.49	
>UL FP \uparrow Mode	M		9.2.1.66	
>ToAWS	M		9.2.1.61	
>ToAWE	M		9.2.1.60	
>DCH Specific Info		<i>1..<maxno ofDCHs></i>		
>>DCH ID	M		9.2.1.20	
>>Transport Format Set	M		9.2.1.59	For UL
>>Transport Format Set	M		9.2.1.59	For DL
>>Allocation/Retention Priority	M		9.2.1.1A	
>>Frame Handling Priority	M		9.2.1.30	
>>QE-Selector	M		9.2.1.50A	

Range \uparrow Bound	Explanation
<i>Mmaxno ofDCHs</i>	Maximum number of DCHs for one UE.

9.2.2.4E DCHs FDD \uparrow To Modify

The *DCHs FDD \uparrow To Modify* IE provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Descriptions
DCHs FDD \uparrowTo Modify		<i>1..<maxno ofDCHs></i>		
>UL FP Mode	O		9.2.1.66	
>ToAWS	O		9.2.1.61	
>ToAWE	O		9.2.1.60	
>Transport Bearer Request Indicator	M		9.2.1.62A	
>DCH Specific Info		<i>1..<maxno ofDCHs></i>		
>>DCH ID	M		9.2.1.20	
>>Transport Format Set	O		9.2.1.59	For the UL.
>>Transport Format Set	O		9.2.1.59	For the DL.
>>Allocation/Retention Priority	O		9.2.1.1A	
>>Frame Handling Priority	O		9.2.1.20	

Range \uparrow Bound	Explanation
<i>Mmaxno ofDCHs</i>	Maximum number of DCHs for one UE.

9.2.2.5 D-Field Length

Void.

9.2.2.6 Dedicated Channels Capacity Consumption Law

Void

9.2.2.7 Diversity Control Field

Void.

9.2.2.8 Diversity Indication

Void.

9.2.2.9 Diversity mode

Define the diversity mode to be applied.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Diversity Mode			ENUMERATED_(None, STTD, Closed loop mode 1, Closed loop mode_2, ...)	

9.2.2.10 DL DPCH Slot Format

Indicates the slot format used in DPCH in DL, accordingly to ref. [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL DPCH Slot Format			INTEGER (0..16,...)	

9.2.2.11 DL frame type

Void.

9.2.2.12 DL or Global Capacity Credit

Void

9.2.2.12A DL_power_averaging_window_size

The *DL_power_averaging_window_size* IE defines the window size when Limited Power Increase is used [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL_power_averaging_window_size			INTEGER (1..60)	Unit: 1-60 inner loop power adjustments. Range: 1..60 Step size: 1 adjustment

9.2.2.12B DL Power Balancing Information

The *DL Power Balancing Information* IE provides information for power balancing to be activated in the relevant RL(s).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Adjustment Type	M		9.2.2.27	
DL Reference Power	C-Common		DL Power 9.2.1.21	Power on DPCH
DL Reference Power Information	C-Individual	$1..<maxno\ of\ RLs>1..<maxno\ of\ RLs>$		
>RL ID	M		9.2.1.53	
>DL Reference Power	M		DL Power 9.2.1.21	Power on DPCH
Max Adjustment Step	C-Common Or Individual		9.2.2.20	
Adjustment Period	C-Common Or Individual		9.2.2.A	
Adjustment Ratio	C-Common Or Individual		9.2.2.B	

Condition	Explanation
Common	The IE shall be present if the <i>Power Adjustment Type</i> IE is set to "Common".
Individual	The IE shall be present if the <i>Power Adjustment Type</i> IE is set to "Individual".
CommonOrIndividual	The IE shall be present if the <i>Power Adjustment Type</i> IE is set to "Common" or "Individual".

Range Bound	Explanation
$maxno\ of\ RLs$	Maximum number of Radio Links for a UE.

9.2.2.12C DL Power Balancing Activation Indicator

The *DL Power Balancing Activation Indicator* IE indicates that the power balancing is activated in the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power Balancing Activation Indicator			ENUMERATED (DL Power Balancing Activated)	

9.2.2.12D DL Power Balancing Updated Indicator

The *DL Power Balancing Updated Indicator* IE indicates that the power balancing related parameters is updated in the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power Balancing Updated Indicator			ENUMERATED (DL Power Balancing Activated)	

9.2.2.13 DL Scrambling Code

DL scrambling code to be used by the RL. One cell may have multiple DL scrambling codes available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Scrambling Code			INTEGER (0..15)	"0" = Primary scrambling code of the cell "1".."15" = Secondary scrambling code

9.2.2.13A DL TPC Pattern 01 Count

The *DL TPC Pattern 01 Count* IE contains the value of the parameter n, which is used for determining the DL TPC pattern on Radio Links marked with "first RLS" by the *First RLS indicator* IE before UL synchronisation is achieved.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL TPC Pattern 01 Count			INTEGER(0..30,...)	

9.2.2.13B DSCH FDD Information

The *DSCH FDD Information* IE provides information for DSCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions	Criticality	Assigned Criticality
DSCH FDD Information		$1..<maxnoofDSCHs> \rightarrow$ $<maxnoofDSCHs>$			–	
>DSCH ID	M		9.2.1.27		–	
>Transport Format Set	M		9.2.1.59	For DSCH	–	
>Allocation/Retention Priority	M		9.2.1.1A		–	
>Frame Handling Priority	M		9.2.1.30		–	
>ToAWS	M		9.2.1.61		–	
>ToAWE	M		9.2.1.60		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore

Range Bound	Explanation
$M_{maxnoofDSCHs}$	Maximum number of DSCHs for one UE.

9.2.2.13C DPC Mode

The *DPC Mode* IE indicates the DPC mode to be applied [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
DPC Mode			ENUMERATED (Mode0, Mode1, ...)	"Mode0": The Node B shall estimate the UE transmitted TPC command and update the DL power in every slot "Mode1": The Node B shall estimate the UE transmitted TPC command over three slots and shall update the DL power in every three slots

9.2.2.13D DSCH FDD Common Information

The DSCH Common Information includes common information for all DSCHs for one UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Enhanced DSCH PC Indicator	O		9.2.2.13G	
Enhanced DSCH PC	C-EDSCHPC On		9.2.2.13E	

Condition	Explanation
EDSCHPCOn	The IE shall be present if the <i>Enhanced DSCH PC-Indicator</i> IE is set to "Enhanced DSCH PC Active in the UE".

9.2.2.13E Enhanced DSCH PC

The Enhanced DSCH PC includes all the parameters which are needed for DSCH power control improvement during soft handover.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Enhanced DSCH PC Wnd	M		9.2.2.13H	
Enhanced DSCH PC Counter	M		9.2.2.13F	
Enhanced DSCH Power Offset	M		9.2.2.13I	

9.2.2.13F Enhanced DSCH PC Counter

The Enhanced DSCH PC Counter parameter gives the number of correct cell ID command to receive in the averaging window, *Enhanced DSCH PC Wnd* IE, see ref. [10] subclause 5.2.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Enhanced DSCH PC Counter			INTEGER(1..50)	

9.2.2.13G Enhanced DSCH PC Indicator

The Enhanced DSCH PC Indicator indicates whether Enhanced DSCH PC is in use by the UE or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH PC Indicator			ENUMERATED_(Enhanced DSCH PC Active in the UE, Enhanced DSCH PC not Active in the UE)	

9.2.2.13H Enhanced DSCH PC Wnd

The Enhanced DSCH PC Wnd parameter shows the window size to decide primary or non-primary cell, see ref. [10] subclause 5.2.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH PC Wnd			INTEGER_(1..10)	

9.2.2.13I Enhanced DSCH Power Offset

The Enhanced DSCH Power Offset parameter gives the power offset to be added on DSCH when cell is decided to be primary.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH Power Offset			INTEGER_(-15..0)	Unit: dB; Range: -15 .. 0 dB Step: 1 dB

9.2.2.14 FDD DL Channelisation Code Number

The DL Channelisation Code Number indicates the DL Channelisation Code number for a specific DL physical channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD DL ChannelisationCode Number			INTEGER_(0..511)	According to the mapping in [9]. The maximum value is equal to the DL spreading factor -1.

9.2.2.14A FDD DL Code Information

The *FDD DL Code Information* IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
FDD DL Code Information		<i>1..<maxno of Codes> to <maxno of Codes></i>		
>DL Scrambling Code	M		9.2.2.13	
>FDD DL Channelisation Code Number	M		9.2.2.14	
>Transmission Gap Pattern Sequence Code Information	O		9.2.2.53B	

Range bBound	Explanation
MmaxnoofCodes	Maximum number of DL code information.

9.2.2.15 FDD SCCPCH Offset

The Secondary CCPCH offset is defined as the time offset towards the Primary CCPCH in the cell. The offset is a multiple of 256 chips.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
FDD SCCPCH Offset			INTEGER_(0..149)	Unit0: 0 chip 1: 256 chip 2: 512 chip ... Range149: 0..38144 chips Step: 256 chips See ref. [7]

9.2.2.16 FDD TPC DL sStep sSize

This parameter indicates step size for the DL power adjustment.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
FDD TPC Downlink sStep sSize			ENUMERATED (0.5, 1, 1.5, 2,...)	StepUnit: dBb

9.2.2.16A First RLS Indicator

The First First RLS Indicator IE indicates if a specific Radio Link and all Radio Links which are part of the same Radio Link Set, shall be considered as the first radio links established towards the UE or not.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
First RLS Indicator			ENUMERATED (fFirst RLS, aNot fFirst RLS)	

9.2.2.17 Gap Period

Void.

9.2.2.18 Gap Position Mode

Void.

9.2.2.18A Limited Power Increase

The parameter is used for a more efficient use of the inner loop DL power control for non real time data.

If the limited power increase is used, the Node B shall use the limited power increase algorithm as specified in [10], subclause 5.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Limited Power Increase			ENUMERATED_(Used, Not Used)	

9.2.2.18B Inner Loop DL PC Status

The *Inner Loop DL PC Status* IE indicates whether inner loop DL control shall be active or inactive for all radio links associated with the context identified by the *Node B Communication Context Id* IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Inner Loop DL PC Status			ENUMERATED_(Active, Inactive)	

9.2.2.18C IPDL FDD Parameters

The *IPDL FDD Parameters* IE provides information about IPDL to be applied for FDD when activated.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
IP Spacing FDD	M		ENUMERATED (5, 7, 10, 15, 20, 30, 40, 50)	See [10]
IP Length	M		ENUMERATED (5, 10)	See [10]
Seed	M		INTEGER (0..63)	See [10]
Burst Mode Parameters	O		9.2.1.5A	

9.2.2.18D HS-DSCH FDD Information

The HS-DSCH Information provides information for HS-DSCH MAC-d flows to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
HS-DSCH MAC-d Flow Specific Information		1..<Mmax noofMACd Flows>		
>HS-DSCH MAC-d Flow ID	M		9.2.1.31I	
>BLER	M		9.2.1.4A	
>Allocation/Retention Priority	M		9.2.1.1A	
>Priority Queue Information	M	1..<Mmax noofPrioQueues>		
>>Priority Queue ID	M		9.2.1.49C	
>>Scheduling Priority Indicator	M		9.2.1.53H	
>>MAC-d PDU Size Index		1..<Mmax noofMACd PDUindexes>		
>>>SID	M		9.2.1.53I	
>>>MAC-d PDU Size	M		9.2.1.38A	
UE Capabilities Information		1		
>Max TrCH Bits per HS-DSCH TTI	M		ENUMERATED (7300, 14600, 20456, 28800,...)	
>HS-DSCH Multi-code Capability	M		ENUMERATED (5, 10, 15,...)	
>Min Inter-TTI Interval	M		INTEGER (1..3,...)	
>MAC-hs Reordering Buffer Size	M		INTEGER (1..300,...)	Total combined receiving buffer capability in RLC and MAC-hs in kBytes
HARQ Memory Partitioning		1..<Mmax noofHARQ processes >		
>Process Memory Size	M		INTEGER (1..172800,...)	
Measurement Feedback Offset	M		INTEGER (0..79,...)	

Range bound	Explanation
MmaxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
MmaxnoofPrioQueues	Maximum number of Priority Queues
MmaxnoofHARQprocesses	Maximum number of HARQ processes for one UE
MmaxnoofMACdPDUindexes	Maximum number of different MAC-d PDU SIDs
MmaxAllowedinterTTI	Maximum Inter-TTI Interval that should be supported by any UE
MmaxRecordBuffSize	Maximum MAC-hs re-ordering buffer size
MmaxProcessMemSize	Maximum HARQ process memory size

9.2.2.18E HS-DSCH FDD Information Response

The HS-DSCH Information Response provides information for HS-DSCH that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
HS-DSCH MAC-d Flow Specific Information Response		1..<MmaxnoofMACdFlows>		
>HS-DSCH MAC-d Flow ID	M		9.2.1.311	
>Binding ID	O		9.2.1.4	
>Transport Layer Address	O		9.2.1.63	
HS-SCCH Code		1..<MmaxnoofHSSCCHcodes>		
>Code Number	M		INTEGER (0..127)	
Measurement Feedback Reporting Cycle k1	M		Measurement Feedback Reporting Cycle 9.2.2.21B	employed by the UE when not in soft handover
Measurement Feedback Reporting Cycle k2	M		Measurement Feedback Reporting Cycle 9.2.2.21B	employed by the UE when in soft handover

Range Bound	Explanation
MmaxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
MmaxnoofPrioQueues	Maximum number of Priority Queues
MmaxnoofMACdPDUindexes	Maximum number of MAC-d PDU Size Indexes
MmaxnoofHSSCCHcodes	Maximum number of HS-SCCH codes
maxCodeNumComp	Maximum number of codes at the defined spreading factor, within the complete code tree

9.2.2.18F HS-PDSCH FDD Code Information

This parameter defines the codes which will be assigned for HS-PDSCHs.

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Number of HS-PDSCH Codes	M		INTEGER (0..maxCodeNumComp-1)	.
Start Code Number	C-NumCodes		INTEGER (0..maxCodeNumComp-1)	

Condition	Explanation
NumCodes	The IE shall be present if the <i>Number of HS-PDSCH Codes</i> IE is set to a value greater than 0.

Range Bound	Explanation
MaxCodeNumComp	Maximum number of codes at the defined spreading factor, within the complete code tree

9.2.2.18G HS-SCCH FDD Code Information

This parameter defines the codes which will be assigned for HS-SCCH. The Node B will assign codes for HS-SCCHs among these codes when it sets up a HS-DSCH.

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Code		0..<MaxnoofHSSCCHs>		
>Code Number	M		INTEGER (0..maxCodeNumComp-1)	

Range Bound	Explanation
MaxnoofHSSCCHs	Maximum number of HS-SCCHs for one cell.
MaxCodeNumComp	Maximum number of codes at the defined spreading factor, within the complete code tree.

9.2.2.18H HS-SCCH ID

The HS-SCCH ID identifies unambiguously a HS-SCCH and its paired HS-SICH within the set of HS-SCCHs.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
HS SCCH ID			INTEGER (0..31)	

9.2.2.19 Max Adjustment Period

Void.

9.2.2.20 Max Adjustment Step

Defines the maximum allowed value for the change of DL power level during a certain number of slots that can be utilised by the downlink power balancing algorithm. *Max Adjustment Step* IE defines a time period, in terms of number of slots, in which the accumulated power adjustment shall be maximum 1dB. This value does not include the DL inner loop PC adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Adjustment Step			INTEGER (1..10)	Unit : Slots

9.2.2.20A Max Number Of PCPCHes

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Number Of PCPCHes			INTEGER (1..64,...)	

9.2.2.21 Maximum Number Of UL DPDCHs

Maximum number of uplink DPDCHs to be used during the connection. Needed by the rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Number Of UL DPDCHs			INTEGER (1..6)	

9.2.2.21A Maximum PDSCH Power

The *Maximum PDSCH Power* IE can contain for each a PDSCH SF a maximum PDSCH power. The maximum

PDSCH power shall be applied for each individual channelisation code at the concerning SF when used for a PDSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum PDSCH Power SF4	O		DL Power 9.2.1.21	
Maximum PDSCH Power SF8	O		DL Power 9.2.1.21	
Maximum PDSCH Power SF16	O		DL Power 9.2.1.21	
Maximum PDSCH Power SF32	O		DL Power 9.2.1.21	
Maximum PDSCH Power SF64	O		DL Power 9.2.1.21	
Maximum PDSCH Power SF128	O		DL Power 9.2.1.21	
Maximum PDSCH Power SF256	O		DL Power 9.2.1.21	

9.2.2.21B Measurement Feedback Reporting Cycle

The *Measurement Feedback Reporting Cycle* IE provides the duration of the measurement feedback reporting cycle.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Feedback Reporting Cycle			ENUMERATED (0, 1, 5, 10, 20, 40, 80,...)	Multiples of 2 ms intervals

9.2.2.22 Minimum UL Channelisation Code Length

Minimum UL channelisation code length (spreading factor) of a DPDCH which is used during the connection. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Min UL Channelisation Code Length			ENUMERATED (4, 8, 16, 32, 64, 128, 256,...)	

9.2.2.23 Multiplexing Position

Multiplexing Position specifies whether fixed or flexible positions of transport channels shall be used in the physical channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiplexing Position			ENUMERATED_ (Fixed, Flexible)	

9.2.2.23A N_EOT

The N_EOT is defined as number of End of Transmission for release of PCPCH transmission.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_EOT			INTEGER (0..8)	Unit: TTI Value "8" is never used in this release.

9.2.2.23B NF_max

The NF_max is defined as maximum number of Frame in a PCPCH message data part.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
NF_max			INTEGER (1..64,...)	

9.2.2.23C N_Start_Message

The N_Start_Message is defined as number of Frames for start message of DL DPCHes for a CPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_Start_Message			INTEGER (1..8)	

9.2.2.24 Pattern Duration (PD)

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PD			INTEGER(0..2047, ...)	Frames If the value is set to '0', the Pattern Duration shall be interpreted as 'infinite'

Void.

9.2.2.24A PCP Length

Indicates CPCH power control preamble length.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PCP Length			ENUMERATED (0..8)	

9.2.2.25 PDSCH Code Mapping

This IE indicates the association between each possible value of TFCI(field 2) and the corresponding PDSCH channelisation code(s). There are three fundamentally different ways that the UTRAN must choose between in order to signal the mapping information, these are described below. The signalling capacity consumed by the different methods will vary depending on the way in which the UTRAN configures usage of the DSCH. A fourth option is also provided which allows the UTRAN to replace individual entries in the TFCI(field 2) to PDSCH code mapping table with new PDSCH code values.

Method #1 - Using code range

The mapping is described in terms of a number of groups, each group associated with a given spreading factor. Each TFCI(field2) value corresponds to a given PDSCH channelisation code or set of PDSCH codes for multi-code. The Node B maps TFCI(field2) values to PDSCH codes in the following way:

- The PDSCH codes used for TFCI(field 2) = 0 are given by the SF of the Code Group 1 (i.e. first instance in *PDSCH eCode mMapping*) and the code numbers between CodeNumber₀ (where CodeNumber₀ = "Start eCode nNumber" of Code Group 1) and CodeNumber₀ + "mMulti-eCode iInfo" - 1.
- This continues with unit increments in the value of TFCI (Field2) mapped to either unit increments in code numbers or groups of contiguous code numbers in case of multi-code, this until "Stop eCode nNumber" is reached:
So the PDSCH codes used for TFCI(field 2) = k (for k > 0 and k < ("Stop eCode nNumber" - "Start eCode nNumber" + 1) DIV k) are given by the SF of the Code Group 1 and the code numbers between CodeNumber_k = CodeNumber_{k-1} + "mMulti-eCode iInfo" and CodeNumber_k + "mMulti-eCode iInfo" - 1.
If "Stop eCode nNumber" = "Start eCode nNumber" + "mMulti-eCode iInfo" - 1 then this is to be interpreted as defining the mapping between the channelisation code(s) and a single TFCI.
- The Node B constructs its mapping table by repeating this process for all the Code Groups in the order they are instantiated in *PDSCH eCode mMapping*. The first TFCI(field 2) value used in each group is the largest TFCI(field 2) value reached in the previous group incremented by one.

Note: This imposes that "Stop eCode nNumber" - "Start eCode nNumber" + 1 is a multiple of the value "mMulti-eCode iInfo" for each instance of *PDSCH eCode mMapping*. Furthermore, in the case where multi-code is not used, then "mMulti-eCode iInfo" = 1 and the process above also applies.

Method #2 - Using TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given PDSCH channelisation code or codes for multicode.

- The set of PDSCH codes specified in the first instance applies for all values of TFCI(field 2) between 0 and the specified "Max TFCI(field2)".
- The process continues in the same way for the following groups with the TFCI(field 2) value starting at the largest value reached in the previous instance incremented by one.
So the set of PDSCH codes specified in a given instance apply for all the values of TFCI(field 2) between the "Max TFCI(field2) value" specified in the previous instance incremented by one and the specified "Max TFCI(field2)" of the considered instance.

A set of PDSCH codes is composed of all the codes between "Code Number" and "Code Number" + "Multi-Code Infomulticode" - 1. So if multi-code is not used, the set of PDSCH codes is reduced to one element indicated by the *Code Number* IE.

Method #3 - Explicit

The mapping between TFCI(field 2) value and PDSCH channelisation code (or a set of PDSCH codes for multicode) is spelt out explicitly for each value of TFCI (field2).

A set of PDSCH codes is composed of all the codes between "Code Number" and "Code Number" + "Multi-Code Infomulticode" - 1. So if multi-code is not used, the set of PDSCH codes is reduced to one element indicated by the *Code Number* IE.

Method #4 - Replace

The "TFCI (field2)" value(s) for which the mapping to PDSCH channelisation code (or a set of PDSCH codes for multicode) is changed are explicitly signalled. Furthermore, the new mapping between TFCI(field 2) value and PDSCH channelisation code(s) is spelt out explicitly for each value of TFCI (field2).

A set of PDSCH codes is composed of all the codes between "Code Number" and "Code Number" + "Multi-Code Infomulticode" - 1. So if multi-code is not used, the set of PDSCH codes is reduced to one element indicated by the *Code Number* IE.

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Scrambling Code	M		INTEGER (0..15) 9.2.2.13	Scrambling code on which PDSCH is transmitted. 0 = Primary scrambling code of the cell 1...15 = Secondary scrambling code
CHOICE Signalling Method				
>> Code Range				
>>> PDSCH Code Mapping		1..<Mmax NoCodeGroups>		
>>> Spreading Factor	M		Enumerated ENUMERATED (4, 8, 16, 32, 64, 128, 256...)	
>>> Multi-Code Info	M		Integer INTEGER (1..16)	
>>> Start Code Number	M		Integer INTEGER (0..maxCodeNumComp-1)	PDSCH code start, Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>>> Stop Code Number	M		Integer INTEGER (0..maxCodeNumComp-1)	PDSCH code stop, Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>> TFCI Range				
>>> DSCH Mapping		1..<Mmax NoTFCIGroups>		
>>> Max TFCI(field2) Value	M		Integer INTEGER (1..1023)	This is the maximum value in the range of TFCI(field 2) values for which the specified PDSCH code applies
>>> Spreading Factor	M		Enumerated ENUMERATED (4, 8, 16, 32, 64, 128, 256...)	SF of PDSCH code
>>> Multi-Code Info	M		Integer INTEGER (1..16)	
>>> Code Number	M		Integer INTEGER (0..maxCodeNumComp-1)	Code number of PDSCH code. Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>> Explicit				
>>> PDSCH Code		1..<Mmax TFCI_2_Combos>		The first instance of the parameter PDSCH code corresponds to TFCI (field2) = 0, the second to TFCI(field 2) = 1 and so on.
>>> Spreading Factor	M		Enumerated ENUMERATED (4, 8, 16, 32, 64, 128, 256...)	SF of PDSCH code
>>> Multi-Code Info	M		Integer INTEGER (1..16)	
>>> Code Number	M		Integer INTEGER (0..maxCodeNumComp-1)	Code number of PDSCH code. Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>> Replace				
>>> Replaced PDSCH Code		1..<maxTFCI 2 Combs>1..<Mmax		

		xTFCI_2_Combs		
>>>TFCI (field2)	M		IntegerINTEGER (0..1023)	Value of TFCI(field 2) for which PDSCH code mapping will be changed
>>>Spreading fFactor	M		EnumeratedENUMERATED (4, 8, 16, 32, 64, 128, 256...)	SF of PDSCH code
>>>mMulti-eCode iInfo	M		IntegerINTEGER (1..16)	
>>>Code nNumber	M		IntegerINTEGER (0..maxCodeNumComp-1)	Code number of PDSCH code. Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.

Range Bound	Explanation
maxCodeNumCompMaxCodeNumComp	Maximum number of codes at the defined spreading factor, within the complete code tree.
maxTFCI_2_CombsMaxTFCI_2_Combs	Maximum number of TFCI (field 2) combinations (given by 2 raised to the power of the length of the TFCI field 2)
maxNoTFCIGroupsMaxNoTFCIGroups	Maximum number of groups, each group described in terms of a range of TFCI(field 2) values for which a single PDSCH code applies.
maxNoCodeGroupsMaxNoCodeGroups	Maximum number of groups, each group described in terms of a range of PDSCH channelisation code values for which a single spreading factor applies.

9.2.2.26 PICH Mode

The number of paging indicators (PIs) in a PICH frame.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PICH Mode			EnumeratedENUMERATED (18, 36, 72, 144...)	Number of PIs per frame

9.2.2.27 Power Adjustment Type

Defines the characteristic of the power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Adjustment Type			ENUMERATED (None, Common, Individual)	

9.2.2.28 Power Control Mode

Void.

9.2.2.29 Power Offset

This IE defines a power offset relative to the Downlink transmission power of a DPDCH or a Secondary CCPCH data field or a DL-DPCCH for CPCH pilot field..

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Offset			INTEGER (0..24)	Unit: dB Range: 0..6 dB Step: 0.25 dB, range 0-6 dB

9.2.2.29A Power_Raise_Limit

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power_Raise_Limit			INTEGER (0..10)	Unit: dB Range: 0..10 dB Step-size: 1 dB

9.2.2.30 Power Resume Mode

Void.

9.2.2.31 Preamble Signature

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Preamble Signatures			BIT STRING (16)	Each bit indicates availability for a signature, where the signatures are numbered "signature 0" up to "signature 15". The value 1 of a bit indicates that the corresponding signature is available and the value 0 that it is not available. The order of bits is to be interpreted according to subclause 9.3.4. See also [9].

9.2.2.32 Preamble Threshold

The IE sets the threshold for preamble detection. The ratio between received preamble power during the preamble period and interference level shall be above this threshold in order to be acknowledged.

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Preamble Threshold			INTEGER (0..72)	Unit: dB Range: 0..-36.0 dB Step1: -35.5 dB Step2: -35.0 dB Step72: 0.0 dB

9.2.2.33 Primary CPICH Power

The Primary CPICH power is the power that shall be used for transmitting the P-CPICH in a cell. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CPICH Power			ENUMERATED (-10..50)	Unit: dBm Granularity: 0.1 dB

9.2.2.34 Primary Scrambling Code

The Primary scrambling code to be used in the cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary Scrambling Code			Integer-INTEGER (0..511)	

9.2.2.35 Propagation Delay

The Propagation delay is the one-way propagation delay of the radio signal from the MS to the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Propagation Delay			INTEGER (0..255)	Unit: Chips; Range: 0..765 chips; Step size is 3 chips; 0=0 chips; 1=3 chips, ...

9.2.2.36 QE-Selector

Void.

9.2.2.37 RACH Slot Format

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RACH Slot Format			ENUMERATED (0..3, ...)	See ref. [7].

9.2.2.38 RACH Sub Channel Numbers

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RACH Sub Channel Numbers			BIT STRING (12)	Each bit indicates availability for a subchannel, where the subchannels are numbered "subchannel 0" to "subchannel 11". The value 1 of a bit indicates that the corresponding subchannel is available and the value 0 indicates that it is not available. The order of bits is to be interpreted according to subclause 9.3.4.

9.2.2.39 RL Set ID

The RL Set ID uniquely identifies one RL Set within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL Set ID			INTEGER (0..31)	

9.2.2.39A Received ϵ Total w Wide b Band p Power

The Received total wide band power indicates the UL interference at a certain cell under CRNC, see ref. [4].

IE/Group Name	Presence	Range	IE ϵ Type and r Reference	Semantics d Description
Received ϵ Total w Wide b Band p Power			INTEGER_(0..621)	According to mapping in [22].

9.2.2.40 S-Field Length

The UE uses the S Field of the UL DPCCH slot to send the SS DT Cell ID to the network.

IE/Group Name	Presence	Range	IE ϵ Type and r Reference	Semantics d Description
S Field Length			ENUMERATED (1, 2,...)	

9.2.2.41 Scrambling Code Change

Void.

9.2.2.42 Scrambling Code Number

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Scrambling Code w ord Number			INTEGER (0..15)	Identification of scrambling code see ref. [9].

9.2.2.43 Secondary CCPCH Slot Format

IE/Group Name	Presence	Range	IE ϵ Type and r Reference	Semantics d Description
Secondary CCPCH Slot Format			INTEGER_(0..17,...)	

9.2.2.44 SS DT Cell Identity

The SS DT Cell ID is a temporary ID for SS DT assigned to a cell.

IE/Group Name	Presence	Range	IE ϵ Type and r Reference	Semantics d Description
SS DT Cell Identity			ENUMERATED (a, b,..., h)	

9.2.2.44A SS DT Cell Identity f For EDSCHPC

The SS DT Cell Identity for EDSCHPC is a temporary ID for enhanced DSCH power control assigned to a cell.

IE/Group Name	Presence	Range	IE ϵ Type and r Reference	Semantics d Description
SS DT Cell Identity f For EDSCHPC			SS DT Cell Identity 9.2.2.44	

9.2.2.45 SSdT Cell ID Length

The SSdT Cell ID Length parameter shows the length of the SSdT Cell ID.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell ID Length			ENUMERATED_(Short, Medium, Long)	

9.2.2.46 SSdT Support Indicator

The SSdT Support Indicator indicates whether a RL supports SSdT or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SSdT Support Indicator			ENUMERATED_(SSdT Supported, SSdT Not Supported)	

9.2.2.47 SSdT Indication

The SSdT Indication indicates whether SSdT is in use by the UE or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SSdT Indication			ENUMERATED_(SSdT Active in the UE, SSdT Not Active in the UE)	

9.2.2.48 STTD Indicator

Indicates if STTD shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
STTD Indicator			ENUMERATED_(active, inactive)	

9.2.2.49 T Cell

Timing delay used for defining start of SCH, CPICH and the DL scrambling code(s) in a cell relative BFN. Resolution 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T Cell			EnumeratedENUMERATED_RATED (0, 1,...,9)	Unit: 0 chip Step: 256 chips Range: 0..2304 chips Step: 256 chips See ref. [17]

9.2.2.49A TFCI2 Bearer Information Response

The *TFCI2 Bearer Information Response* IE provides information for TFCI2 bearer that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
Binding ID	M		9.2.1.4	
Transport Layer Address	M		9.2.1.63	

9.2.2.50 TFCI Signalling Mode

This parameter indicates if the normal or split mode is used for the TFCI. In the event that the split mode is to be used then the IE indicates whether the split is "Hard" or "Logical", and in the event that the split is "Logical" the IE indicates the number of bits in TFCI (field 2).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
TFCI Signalling Option	M		ENUMERATED (Normal, Split)	"Normal": meaning no split in the TFCI field (either "Logical" or "Hard") "Split": meaning there is a split in the TFCI field (either "Logical" or "Hard")
Split type	C-IfSplit		Enumerated ENUMERATED (Hard, Logical)	"Hard": meaning that TFCI (field 1) and TFCI (field 2) are block coded separately. "Logical": meaning that on the physical layer TFCI (field 1) and TFCI (field 2) are concatenated, field 1 taking the most significant bits and field 2 taking the least significant bits. The whole is then encoded with a single block code.
Length Of TFCI2	O		Integer-INTEGER (1..10)	This IE indicates the length measured in number of bits of TFCI (field2).

Condition	Explanation
IfSplit	The IE shall be present if the <i>TFCI Signalling Option</i> IE is set to "Split".

9.2.2.51 TGD

Void.

9.2.2.52 TGL

Void.

9.2.2.53 Transmit Diversity Indicator

The Transmit Diversity Indicator indicates whether transmit diversity shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmit Diversity Indicator			ENUMERATED_(active, inactive)	

9.2.2.53A Transmission Gap Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence. For details see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Transmission Gap Pattern Sequence Information		$1..<maxTGPS>4$ $<MaxTGPS>$		
>TGPS Identifier	M		Integer INTEGER (1..<MmaxTGPS>)	Transmission Gap Pattern Sequence Identifier: Establish a reference to the compressed mode pattern sequence. Up to <MmaxTGPS> simultaneous compressed mode pattern sequences can be used.
>TGSN	M		Integer INTEGER (0..14)	Transmission Gap Starting Slot Number: The slot number of the first transmission gap slot within the TGCFN.
>TGL1	M		Integer INTEGER (1..14)	The length of the first Transmission Gap within the transmission gap pattern expressed in number of slots.
>TGL2	O		Integer INTEGER (1..14)	The length of the second Transmission Gap within the transmission gap pattern. If omitted, then TGL2=TGL1.
>TGD	M		Integer INTEGER (0, 15.. 269)	Transmission Gap Distance: indicates the number of slots between the starting slots of two consecutive transmission gaps within a transmission gap pattern. If there is only one transmission gap in the transmission gap pattern, this parameter shall be set to "0" ("0" =undefined).
>TGPL1	M		Integer INTEGER (1..144,...)	The duration of transmission gap pattern 1 in frames.
>TGPL2	O		Integer INTEGER (1..144,...)	The duration of transmission gap pattern 2 in frames. If omitted, then TGPL2=TGPL1.
>UL/DL Mode	M		Enumerated ENUMERATED (UL only, DL only, UL/DL)	Defines whether only DL, only UL, or combined UL/DL compressed mode is used.
>Downlink Compressed Mode Method	C-DL		Enumerated ENUMERATED (Puncturing, SF/2, Higher Layer Scheduling, ...)	Method for generating downlink compressed mode gap None means that compressed mode pattern is stopped.
>Uplink Compressed Mode Method	C-UL		Enumerated ENUMERATED (SF/2, Higher Layer Scheduling, ...)	Method for generating uplink compressed mode gap.
>Downlink Frame Type	M		Enumerated ENUMERATED (A, B,...)	Defines if frame structure type "A" or "B" shall be used in downlink compressed mode.
>DeltaSIR1	M		Integer INTEGER (0..30)	Delta in SIR target value to be set in the Node B during the frame containing the start of the first transmission gap in

				the transmission gap pattern (without including the effect of the bit-rate increase). Unit: dB Range: 0..3 dB Step: 0.1 dB, Range 0-3dB
>DeltaSIRafter1	M		Integer/INTEGER (0..30)	Delta in SIR target value to be set in the Node B one frame after the frame containing the start of the first transmission gap in the transmission gap pattern. Unit: dB Range: 0..3 dB Step: 0.1 dB, Range 0-3dB
>DeltaSIR2	O		Integer/INTEGER (0..30)	Delta in SIR target value to be set in the Node B during the frame containing the start of the second transmission gap in the transmission gap pattern (without including the effect of the bit-rate increase). When omitted, DeltaSIR2 = DeltaSIR1. Unit: dB Range: 0..3 dB Step: 0.1 dB, Range 0-3dB
>DeltaSIRafter2	O		Integer/INTEGER (0..30)	Delta in SIR target value to be set in the Node B one frame after the frame containing the start of the second transmission gap in the transmission gap pattern. When omitted, DeltaSIRafter2 = DeltaSIRafter1. Unit: dB Range: 0..3 dB Step: 0.1 dB, Range 0-3dB

Condition	Explanation
UL	The IE shall be present if the <i>UL/DL mode</i> IE is set to "UL only" or "UL/DL".
DL	The IE shall be present if the <i>UL/DL mode</i> IE is set to "DL only" or "UL/DL".

Range bBound	Explanation
maxTGPSMaxTGPS	Maximum number of transmission gap pattern sequences.

9.2.2.53B Transmission Gap Pattern Sequence Code Information

This IE indicates whether the alternative scrambling code shall used for the Downlink compressed mode method or not in the Transmission Gap Pattern Sequence. For details see [189].

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
Transmission Gap Pattern Sequence Code Information Scrambling code change			Enumerated ENUMERATED (Code Change, No Code Change)	Indicates whether the alternative scrambling code is used for compressed mode method "SF/2".

9.2.2.54 UL/DL compressed mode selection:

Void.

9.2.2.55 UL delta SIR

Void.

9.2.2.56 UL delta SIR after

Void.

9.2.2.57 UL DPCCH Slot Format

Indicates the slot format used in DPCCH in UL, according to ref. [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
UL DPCCH Slot Format			INTEGER (0..5,...)	

9.2.2.58 UL SIR

Void

9.2.2.59 UL Scrambling Code

The UL Scrambling Code is the scrambling code used by UE. Every UE has its specific UL Scrambling Code.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
UL Scrambling Code Number	M		INTEGER (0.. $2^{24}-1$)	
UL Scrambling Code Length	M		ENUMERATED_ Short, Long)	

9.2.2.60 UL Capacity Credit

Void

9.2.3 TDD specific Parameters

9.2.3.1 Block STTD Indicator

Void.

9.2.3.2 Burst Type

Void.

9.2.3.3 CCTrCH ID

The CCTrCH ID for dedicated and shared channels identifies unambiguously an uplink or downlink CCTrCH inside a Radio Link. For S-CCPCH, it identifies unambiguously a downlink CCTrCH within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CCTrCH ID			INTEGER (0..15)	

9.2.3.4 Cell Parameter ID

The Cell Parameter ID identifies unambiguously the [3.84 Mcps TDD - Code Groups, Scrambling Codes, Midambles and Toffset] [1.28 Mcps TDD - SYNC-DL and SYNC-UL sequences, the scrambling codes and the midamble codes] (see ref. [20]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Parameter ID			INTEGER (0..127,...)	

9.2.3.4A Constant Value

The Constant Value is the power margin used by a UE to set the proper uplink power for a DCH, USCH, or a RACH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Constant Value			INTEGER (-10..10,...)	Unit: dB Range: -10 .. +10 dB StepGranularity: 1 dB.

9.2.3.4B DL Timeslot ISCP

The DL Timeslot ISCP is the measured interference in a downlink timeslot at the UE, see ref. [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Timeslot ISCP			INTEGER (0..91)	According to mapping in ref. [5].

9.2.3.4C DCH TDD Information

The *DCH TDD Information* IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \downarrow Descriptions
DCH TDD Information		<i>1..<maxno of DCHs>1 to <maxno of DCHs></i>		
>Payload CRC Presence Indicator	M		9.2.1.49	
>UL FP \uparrow Mode	M		9.2.1.66	
>ToAWS	M		9.2.1.61	
>ToAWE	M		9.2.1.60	
>DCH Specific Info		<i>1..<maxno of DCHs></i>		
>>DCH ID	M		9.2.1.20	
>>CCTrCH ID	M		9.2.3.3	UL CCTrCH in which the DCH is mapped
>>CCTrCH ID	M		9.2.3.3	DL CCTrCH in which the DCH is mapped
>>Transport Format Set	M		9.2.1.59	For UL
>>Transport Format Set	M		9.2.1.59	For DL
>>Allocation/Retention Priority	M		9.2.1.1A	
>>Frame Handling Priority	M		9.2.1.30	
>>QE-Selector	C-CoordDCH		9.2.1.50A	

Condition	Explanation
CoordDCH	The IE shall be present if this DCH is part of a set of coordinated DCHs (number of instances of the <i>DCH Specific Info</i> IE is greater than 1).

Range \downarrow Bound	Explanation
<i>Mmaxno of DCHs</i>	Maximum number of DCHs for one UE

9.2.3.4D DCHs TDD \uparrow To Modify

The *DCHs TDD \uparrow To Modify* IE provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE type and reference	Semantics descriptions	Criticality	Assigned Criticality
DCHs TDD to Modify		1..<maxnoofDCHs>			GLOBAL	reject
>UL FP Mode	O		9.2.1.66		⋮	
>ToAWS	O		9.2.1.61		⋮	
>ToAWE	O		9.2.1.60		⋮	
>Transport Bearer Request Indicator	M		9.2.1.62A		⋮	
>DCH Specific Info		1..<maxnoofDCHs>			⋮	
>>DCH ID	M		9.2.1.20		⋮	
>>CCTrCH ID	O		9.2.3.3	UL CCTrCH in which the DCH is mapped.	⋮	
>>CCTrCH ID	O		9.2.3.3	DL CCTrCH in which the DCH is mapped	⋮	
>>Transport Format Set	O		9.2.1.59	For the UL.	⋮	
>>Transport Format Set	O		9.2.1.59	For the DL.	⋮	
>>Allocation/Retention Priority	O		9.2.1.1A		⋮	
>>Frame Handling Priority	O		9.2.1.30		⋮	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCHs TDD To Modify		1..<maxnoofDCHs>		
>UL FP Mode	O		9.2.1.66	
>ToAWS	O		9.2.1.61	
>ToAWE	O		9.2.1.60	
>Transport Bearer Request Indicator	M		9.2.1.62A	
>DCH Specific Info		1..<maxnoofDCHs>		
>>DCH ID	M		9.2.1.20	
>>CCTrCH ID	O		9.2.3.3	UL CCTrCH in which the DCH is mapped.
>>CCTrCH ID	O		9.2.3.3	DL CCTrCH in which the DCH is mapped
>>Transport Format Set	O		9.2.1.59	For the UL.
>>Transport Format Set	O		9.2.1.59	For the DL.
>>Allocation/Retention Priority	O		9.2.1.1A	
>>Frame Handling Priority	O		9.2.1.30	

Range Bound	Explanation
MmaxnoofDCHs	Maximum number of DCHs for one UE

9.2.3.4E DL Timeslot Information

The DL Timeslot Information IE provides information for DL Time slot to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
DL Timeslot Information		$1..<max\ no\ of\ DLts>1..$ $<max\ no\ of\ DLts>$		
>Time Slot	M		9.2.3.23	
>Midamble Shift and Burst Type	M		9.2.3.7	
>TFCI Presence	M		9.2.1.57	
>DL Code Information	M		TDD DL Code Information 9.2.3.19B	

Range Bound	Explanation
$M_{max\ no\ of\ DLts}$	Maximum number of Downlink time slots per Radio Link

9.2.3.4F DL Time Slot ISCP Info

The *DL Time Slot ISCP Info* IE provides information for DL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
DL Time Slot ISCP Info		$1..<max\ no\ of\ DLts>1..$ $<max\ no\ of\ DLts>$		
>Time Slot	M		9.2.3.23	
>DL Timeslot ISCP	M		9.2.3.4B	

Range Bound	Explanation
$M_{max\ no\ of\ DLts}$	Maximum number of Downlink time slots per Radio Link for 3.84Mcps TDD.

9.2.3.4G Cell Sync Burst Code

The *Cell Sync Burst Code* IE indicates which Code is used for a given Cell Sync Burst.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Cell Sync Burst Code			INTEGER (0..7)	

9.2.3.4H Cell Sync Burst Code Shift

The *Cell Sync Burst Code Shift* IE indicates the number of code shifts used for a given Cell Sync Burst.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
Cell Sync Burst Code Shift			INTEGER (0..7)	

9.2.3.4I CSB Measurement ID

The *Cell Sync Burst Measurement ID* IE uniquely identifies any cell synchronization burst measurement per Node B - eControl Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CSB Measurement ID			Integer INTEGER (0..65535)	

9.2.3.4J Cell Sync Burst Repetition Period

The *Cell Sync Burst Repetition Period* IE represents the number of consecutive Radio Frames after which the cell synchronisation burst transmission/measurement is repeated. This means that if the Time Slot K is assigned to the cell synchronisation burst transmission/measurements in the Radio Frame J , the cell synchronisation burst transmission/measurement is also in all the Radio Frames $J+n*Repetition\ Period$.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst Repetition Period			INTEGER (0..4095)	

9.2.3.4K Cell Sync Burst SIR

Indicates the Signal to Interference Ratio of the cell synchronisation burst measurement according definition in [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst SIR			INTEGER (0..31)	According to mapping in [23]

9.2.3.4L Cell Sync Burst Timing

The *Cell Sync Burst Timing* IE defines the time of start (defined by the first detected path in time) of the cell synchronisation burst of a neighbouring cell see [5].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell Sync Burst Timing			CHOICE INTEGER (0..255) or INTEGER (0..1048575)	According to mapping in [23]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Phase				According to mapping in [23]
>Initial Phase				
>>Cell Sync Burst Timing Value	M		INTEGER (0..255)	
>Steady State Phase				
>>Cell Sync Burst Timing Value	M		INTEGER (0..1048575)	

9.2.3.4M Cell Sync Burst Timing Threshold

The *Cell Sync Burst Timing Threshold* IE defines the threshold that shall trigger a Cell Synchronisation Report CELL SYNCHRONISATION REPORT message.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst Timing Threshold			INTEGER (0..254)	Unit: 0 chips Range: 0 .. 31.75 chips Step1: 0.125 chips 2: 0.250 chips ... 254: 31.75 chips

9.2.3.4N CSB Transmission ID

The *Cell Sync Burst Transmission ID* IE uniquely identifies any cell synchronisation burst transmission per Node B-*e*Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CSB Transmission ID			Integer INTEGER (0..65535)	

9.2.3.4O DL Timeslot Information LCR

The *DL Timeslot Information LCR* IE provides information for DL Time slot to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
DL Timeslot Information LCR		$1..<maxno\ of\ DLtsLCR>$ $\geq 1..$ $<Maxnoof\ DLtsLCR>$		
>Time Slot LCR	M		9.2.3.24A	
>Midamble Shift LCR	M		9.2.3.7A	
>TFCI Presence	M		9.2.1.57	
>DL Code Information	M		TDD DL Code Information LCR 9.2.3.19C	

Range Bound	Explanation
$MmaxnoofDLtsLCR$	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.

9.2.3.4P DL Time Slot ISCP Info LCR

The *DL Time Slot ISCP Info LCR* IE provides information for DL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
DL Time Slot ISCP Info LCR		$1..<maxno\ of\ DLtsLCR>$ $\geq 1..$ $<maxnoof\ DLLCRs>$		
>Time Slot LCR	M		9.2.3.24A	
>DL Timeslot ISCP	M		9.2.3.4B	

Range bBound	Explanation
<i>MmaxnoofDLtsLCRs</i>	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.

9.2.3.5 DPCH ID

The DPCH ID identifies unambiguously a DPCH inside a Radio Link.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
DPCH ID			INTEGER (0..239)	

9.2.3.5A DSCH TDD Information

The *DSCH TDD Information* IE provides information for DSCHs to be established.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescriptions	Criticality	Assigned Criticality
DSCH TDD Information		<i>1..<max noofDS CHs>† to <Maxno ofDSCH s></i>			–	
>DSCH ID	M		9.2.1.27		–	
>CCTrCH ID	M		9.2.3.2	DL CCTrCH in which the DSCH is mapped	–	
>Transport Format Set	M		9.2.1.59	For DSCH	–	
>Allocation/Retention Priority	M		9.2.1.1A		–	
>Frame hHandling Priority	M		9.2.1.30		–	
>ToAWS	M		9.2.1.61		–	
>ToAWE	M		9.2.1.60		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore

Range bBound	Explanation
<i>MaxnoofDSCHs</i>	Maximum number of DSCH for one UE

9.2.3.5B DwPCH Power

DwPCH Power is the power that shall be used for transmitting the DwPCH in a cell.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription
DwPCH Power			INTEGER (-150..+400,...)	Unit: dBm Range: -15 ..+40 dBm StepGranularity: 0.1 dB

9.2.3.5C Frame Adjustment ν Value

The *Frame Adjustment ν Value* IE represents the frame number correction within the initial synchronisation phase.

IE/Group Name	Presence	Range	IE ν Type and ν Reference	Semantics ν Description
Frame Adjustment ν Value			INTEGER (0..4095)	$SFN_{new}=(SFN_{old}+Frame\ Adjustment\ \nu\ Value)\ mod\ 4096$

9.2.3.5D IPDL TDD Parameter

The *IPDL TDD Parameter* IE provides information about IPDL to be applied for 3.84Mcps TDD ~~3.84Mcps~~ when activated.

IE/Group Name	Presence	Range	IE ν Type and ν Reference	Semantics ν Descriptions
IP ν SpacingTDD	M		ENUMERATED (30, 40, 50, 70, 100, ...)	See [21]
IP Start	M		IntegerINTEGER (0..4095)	See [21]
IP Slot	M		IntegerINTEGER (0..14)	See [21]
IP PCCPCH	M		ENUMERATED_(Switch off 1 frame, Switch off 2 frames)	See [21]
Burst ν Mode parameters	O		9.2.1.5A	

9.2.3.5E Max FPACH Power

Max FPACH Power is the maximum power that shall be used for transmitting the FPACH in a cell.

IE/Group Name	Presence	Range	IE ν Type and ν Reference	Semantics ν Description
FPACH Power			INTEGER (-150..+400,....)	Unit: dBm Range: -15 ..+40 dBm StepGranularity: 0.1 dB

9.2.3.5F HS-DSCH TDD Information

The HS-DSCH TDD Information provides information for HS-DSCH MAC-d flows to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
HS-DSCH MAC-d Flow Specific Information		$1..<M_{max\ noofMACd\ Flows}>$		
>HS-DSCH MAC-d Flow ID	M		9.2.1.31I	
>BLER	M		9.2.1.4A	
>Allocation/Retention Priority	M		9.2.1.1A	
>Priority Queue Information	M	$1..<M_{max\ noofPrioQueues}>$		
>>Priority Queue ID	M		9.2.1.49C	
>>Scheduling Priority Indicator	M		9.2.1.53H	
>>MAC-d PDU Size Index		$1..<M_{max\ noofMACd\ PDUindexes}>$		
>>>SID	M		9.2.1.53I	
>>>MAC-d PDU Size	M		9.2.1.38A	
UE Capabilities Information		1		
>HS-DSCH TrCh Bits Per TTI	M		ENUMERATED (7040, 10228, 14080,...)	
>HS-DSCH Multi-eCode Capability	M		ENUMERATED (8, 12, 16,...)	
>MAC-hs Reordering Buffer Size	M		INTEGER (1..300,...)	Total combined receiving buffer capability in RLC and MAC-hs in kBytes
HARQ Memory Partitioning		$1..<M_{max\ noofHARQ\ processes}>$		
>Process Memory Size	M		INTEGER (1..168960,...)	

Range Bound	Explanation
$M_{max\ noofMACd\ Flows}$	Maximum number of HS-DSCH MAC-d flows
$M_{max\ noofPrioQueues}$	Maximum number of Priority Queues
$M_{max\ noofHARQ\ processes}$	Maximum number of HARQ processes for one UE
$M_{max\ noofMACd\ PDUindexes}$	Maximum number of different MAC-d PDU SIDs
$M_{max\ NoOfHSDSCHTrChBitsPerTTI}$	Maximum Number of HS-DSCH Transport Channel Bits per TTI

9.2.3.5G HS-DSCH TDD Information Response

The HS-DSCH TDD Information Response provides information for HS-DSCH MAC-d flows that have been established or modified.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescription	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information Response		1..<MmaxnoofMACdFlows>			–	
>HS-DSCH MAC-d Flow ID	M		9.2.1.311		–	
>Binding ID	O		9.2.1.4		–	
>Transport Layer Address	O		9.2.1.63		–	
HS-SCCH Specific Information Response		0..<MmaxNoOfHSSCHcodes>			GLOBAL	reject
>Time Slot	M		9.2.3.23		==	
>Midamble Shift aAnd Burst Type	M		9.2.3.7		==	
>TDD Channelisation Code	M		9.2.3.19		==	
>HS-SICH Information		1			==	
>>Time Slot	M		9.2.3.23		==	
>>Midamble Shift aAnd Burst Type	M		9.2.3.7		==	
>>TDD Channelisation Code	M		9.2.3.19		==	
HS-SCCH Specific Information Response LCR		0..<MmaxNoOfHSSCHcodes>			GLOBAL	reject
>Time Slot LCR	M		9.2.3.24A		==	
>Midamble Shift LCR	M		9.2.3.7a		==	
>TDD Channelisation Code LCR	M		9.2.3.19a		==	
>HS-SICH Information LCR		1			==	
>>Time Slot LCR	M		9.2.3.24A		==	
>>Midamble Shift LCR	M		9.2.3.7a		==	
>>TDD Channelisation Code LCR	M		9.2.3.19a		==	

Range bBound	Explanation
MmaxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows.
MmaxnoofPrioQueues	Maximum number of Priority Queues
MmaxnoofMACdPDUindexes	Maximum number of different MAC-d Size Indexes (SIDs)
MmaxnoofHSSCHcodes	Maximum number of HS-SCCH codes

9.2.3.5H IPDL TDD Parameters LCR

The *IPDL TDD Parameters LCR* IE provides information about IPDL to be applied for 1.28Mcps TDD when activated.

IE/Group Name	Presence	Range	IE tType and rReference	Semantics dDescriptions
IP sSpacingTDD	M		ENUMERATED (30, 40, 50, 70, 100, ...)	See [21]
IP Start	M		IntegerINTEGER (0..4095)	See [21]

IP_Sub	M		ENUMERATED_(First, Second, Both)	See [21]
Burst Mode Parameters	O		9.2.1.5A	

9.2.3.6 Max PRACH Midamble Shift

Indicates the maximum number of Midamble shifts to be used in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max PRACH Midamble Shifts			ENUMERATED (4, 8,...)	

9.2.3.7 Midamble Shift And Burst Type

This information element indicates burst type and midamble allocation.

The 256 chip midamble supports 3 different time shifts, the 512 chips midamble may support 8 or even 16 time shifts.

Three different midamble allocation schemes exist:

Default midamble: the midamble shift is selected by layer 1 depending on the associated channelisation code (DL and UL)

Common midamble: the midamble shift is chosen by layer 1 depending on the number of channelisation codes (possible in DL only)

UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL)

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE_Burst Type				
>Type1				
>>Midamble Allocation Mode	M		Enumerated (Default midamble, Common midamble, UE specific midamble)	
>> Midamble Configuration Burst Type 1 And 3	M		Integer(4, 8, 16)	As defined in [19]
>>Midamble Shift	C-UE		Integer(0..15)	
>Type2				
>>Midamble Allocation Mode	M		Enumerated (Default midamble, Common midamble, UE specific midamble)	
>> Midamble Configuration Burst Type 2	M		Integer(3,6)	As defined in [19]
>>Midamble Shift	C-UE		INTEGER (0..5)	
>Type3				UL only
>>Midamble Allocation Mode	M		Enumerated (Default midamble, UE specific midamble)	
>> Midamble Configuration Burst Type 1 And 3	M		Integer(4, 8, 16)	As defined in [19]
>>Midamble Shift	C-UE		Integer(0..15)	

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation Mode IE is set to "UE-specific midamble".

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Burst Type				
>Type1				
>>Midamble Configuration Burst Type 1 And 3	M		INTEGER (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	M			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (0..15)	
>Type2				
>>Midamble Configuration Burst Type 2	M		INTEGER (3,6)	As defined in [19]
>>CHOICE Midamble Allocation Mode	M			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Short	M		INTEGER (0..5)	
>Type3				UL only
>>Midamble Configuration Burst Type 1 And 3	M		INTEGER (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	M			
>>>Default Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (0..15)	

9.2.3.7A Midamble sShift LCR

This information element indicates midamble allocation in 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Midamble Allocation Mode	M		Enumerated ENUMERATED (Default midamble, Common midamble, UE specific midamble, ...)	
Midamble Shift LCR	C-UE		IntegerINTEGER (0..15)	

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation Mode IE is set to "UE-specific midamble".

9.2.3.7B Number of eCycles pPer SFN pPeriod

The Number of eCycles pPer SFN pPeriod IE indicates the number of repetitions per SFN period where the same schedule shall apply.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of eCycles pPer SFN pPeriod			ENUMERATED (1, 2, 4, 8, ..., 16, 32, 64)	

9.2.3.7C Number Of rRepetitions pPer eCycle pPeriod

The *Number Of rRepetitions pPer eCycle pPeriod* IE indicates the number of Sync frames per Cycle Length where the [3.84Mcps TDD - cell synchronisation bursts] [1.28Mcps TDD – Sync_DL Codes] shall be transmitted or the cell synchronisation bursts from the neighbouring cells shall be measured.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of rRepetitions pPer eCycle pPeriod			INTEGER (2..10)	

9.2.3.7D Number Of sSubcycles pPer eCycle pPeriod

The *Number Of sSubcycles pPer eCycle pPeriod* IE indicates the number of subcycles within a Synchronisation Cycle. Within each subcycle, the same sequence of SYNC_DL Code transmissions and receptions is performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of sSubcycles pPer eCycle pPeriod			INTEGER (1..16,...)	

9.2.3.8 Paging Indicator Length

The Paging Indicator Length indicates the number of symbols for Page Indication transmitted in one timeslot (see ref [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging Indicator Length			ENUMERATED (2, 4, 8,...)	

9.2.3.9 PCCPCH Power

The Primary CCPCH power is the power that shall be used for transmitting the P CCPCH in a cell. The P CCPCH power is the reference power in a TDD-cell. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PCCPCH Power			INTEGER (-15..+40,...)	Unit: dBm Range: -15 .. +40 dBm StepGranularity: 0.1 dB

9.2.3.10 PDSCH ID

The PDSCH ID identifies unambiguously a PDSCH inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PDSCH ID			INTEGER (0..255)	

9.2.3.11 PDSCH Set ID

The PDSCH Set Id identifies unambiguously a PDSCH Set inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PDSCH Set ID			INTEGER (0..255)	See ref. [6]

9.2.3.11A Primary CCPCH RSCP

Received Signal Code Power is the received power on PCCPCH of the target cell after despreading. The reference point for the RSCP is the antenna connector at the UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CCPCH RSCP			INTEGER (0..91)	

9.2.3.12 PUSCH ID

The PUSCH ID identifies unambiguously a PUSCH inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PUSCH ID			INTEGER (0..255)	

9.2.3.13 PUSCH Set ID

The PUSCH Set ID identifies unambiguously a PUSCH Set inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PUSCH Set ID			INTEGER (0..255)	See ref. [6]

9.2.3.14 PRACH Midamble

The PRACH Midamble indicates if only the Basic Midamble Sequence or also the time-inverted Midamble Sequence is used.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PRACH Midamble			ENUMERATED (Inverted, Direct, ...)	

9.2.3.14A Reference Clock Availability

The *Reference Clock Availability* IE is used to indicate the presence and operating of a Reference Clock connected to a TDD cell for cell synchronisation purpose.

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Description
Reference Clock \uparrow Availability			ENUMERATED_ Available, Not Available)	

9.2.3.14B Reference SFN \uparrow Offset

The *Reference SFN \uparrow Offset* IE indicates the number of frames the reference SFN shall be shifted compared to the SFN derived from the synchronisation port.

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Description
Reference SFN \uparrow Offset			INTEGER_(0..255)	

9.2.3.15 Repetition Length

The Repetition Length represents the number of consecutive Radio Frames inside a Repetition Period in which the same Time Slot is assigned to the same Physical Channel see ref. [18].

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Description
Repetition Length			INTEGER_(1..63)	

9.2.3.16 Repetition Period

The Repetition Period represents the number of consecutive Radio Frames after which the same assignment scheme of Time Slots to a Physical Channel is repeated. This means that if the Time Slot K is assigned to a physical channel in the Radio Frame J , it is assigned to the same physical channel also in all the Radio Frames $J+n*Repetition\ Period$ (where n is an integer) see ref. [18].

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Description
Repetition Period			ENUMERATED (1, 2, 4, 8, 16, 32, 64...)	

9.2.3.17 SCH Time Slot

The *SCH Time Slot* IE represents the first time slot (k) of a pair of time slots inside a Radio Frame that shall be assigned to the Physical Channel SCH. The *SCH Time Slot* IE is only applicable if the value of *Sync Case* IE is Case 2 since in this case the SCH is allocated in TS# k and TS# $k+8$.

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Description
SCH Time Slot			-INTEGER_(0..6)	

9.2.3.18 Sync \uparrow Case

The SCH and PCCPCH are mapped on one or two downlink slots per frame. There are two cases of SCH and PCCPCH allocation as follows:

- Case 1) SCH and PCCPCH allocated in a single TS# k
- Case 2) SCH allocated in two TS: TS# k and TS# $k+8$
PCCPCH allocated in TS# k

[1.28Mcps TDD - There is no Sync Case indication needed for 1.28Mcps TDD. If the *Sync Case* IE must be included in a message from CRNC to Node B used for 1.28Mcps TDD, the CRNC should indicate Sync Case 1 and the Node B shall ignore it.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Case			Integer-INTEGER (1..2,...)	

9.2.3.18A Special Burst Scheduling

The number of frames between special burst transmissions during DTX.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Special Burst Scheduling			Integer-INTEGER (1, 2, ..., 256)	Number of frames between special burst transmission during DTX

9.2.3.18B SYNC_DL Code ID

The SYNC_DL Code ID identifies the SYNC_DL Code which used by DwPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SYNC_DL Code ID			INTEGER (1..32,...)	

9.2.3.18C Sync Frame Number

The *Sync Frame Number* IE indicates the number of the Sync frame within a Synchronisation Cycle or Subcycle, respectively, where the cell synchronisation bursts shall be transmitted or the cell synchronisation bursts from the neighbouring cells shall be measured.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Frame Number			INTEGER (1..10)	

9.2.3.18D Synchronisation Report Characteristics

The *Synchronisation Report Characteristics* IE defines how the reporting on measured [3.84Mcps TDD - cell synchronisation bursts] [1.28Mcps TDD – Sync_DL Codes] shall be performed

Different methods shall apply for the measured [3.84Mcps TDD - cell synchronisation burst] [1.28Mcps TDD – Sync_DL Codes] reports. [3.84Mcps TDD - In the frequency acquisition phase the measurement report shall be sent when the frequency locking is completed.] In the initial phase and for the measurement on late-entrant cells an immediate report after the measured frame is expected.

In the steady-state phase measurement reports may be given after every measured frame, after every SFN period, after every cycle length or only when the requested threshold is exceeded.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Synchronisation Report Characteristics Type	M		ENUMERATED (Frame related, SFN period related, Cycle length related, Threshold exceeding, Frequency Acquisition	

			completed, ...)	
Threshold eExceeding	C-Threshold eExceeding			Applies only to the Steady State Phase
>Cell Sync Burst Threshold Information		<i>0..<maxnofCellSyncBursts>0..<maxnofCellSyncBursts></i>		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD, only
>>Sync Frame nNumber tTo rReceive	M		Sync Frame nNumber 9.2.3.18C	
>>Cell Sync Burst Information		<i>1..<maxnofreceptionsperSyncFrame>1..<maxnofreceptionsperSyncFrame></i>		
>>>Cell Sync Burst Code	M		9.2.3.4G	
>>>Cell Sync Burst Code sShift	M		9.2.3.4H	
>>>Cell Sync Burst Arrival Time	O		Cell Sync Burst Timing 9.2.3.4L	
>>>Cell Sync Burst Timing Threshold	O		9.2.3.4M	
>SYNC_DL Code Threshold Information LCR		<i>0..<maxnofSyncFramesLCR>0..<maxnofSyncFramesLCR></i>		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD, only
>>Sync Frame nNumber tTo rReceive	M		Sync Frame nNumber 9.2.3.18C	
>>SYNC_DL Code Information LCR		<i>1..<maxnofreceptionsperSyncFrameLCR>1..<maxnofreceptionsperSyncFrameLCR></i>		
>>>SYNC_DL Code ID	M		9.2.3.18B	
>>>SYNC_DL Code ID Arrival Time	O		Cell Sync Burst Timing 9.2.3.4L	
>>>SYNC_DL Code ID Timing Threshold	O		Cell Sync Burst Timing Threshold 9.2.3.4M	

Range bBound	Explanation
<i>maxnofCellSyncBurstsmaxnofCellSyncBursts</i>	Maximum number of cell synchronisation burst per cycle for 3.84Mcps TDD
<i>maxnofreceptionsperSyncFramemaxnofreceptionsperSyncFrame</i>	Maximum number of cell synchronisation burst receptions per Sync Frame for 3.84Mcps TDD
<i>maxnofSyncFramesLCRmaxnofSyncFramesLCR</i>	Maximum number of SYNC Frames per repetition period for 1.28Mcps TDD
<i>maxnofreceptionsperSyncFrameLCRmax</i>	Maximum number of SYNC_DL Code ID receptions per Sync Frame

noofreceptionsperSyncFrameLCR	for 1.28Mcps TDD
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9.2.3.18E Synchronisation Report Type

The *Synchronisation Report Type* IE represents the individual types of synchronisation reports that shall apply within the individual synchronisation phases. (see [17]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Synchronisation Report Type			ENUMERATED (Initial Phase, Steady-State Phase, Late-Entrant Cell, Frequency Acquisition, ...)	

9.2.3.19 TDD Channelisation Code

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code, that can have a spreading factor of 1, 2, 4, 8 or 16.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Channelisation Code			ENUMERATED ((1/1), (2/1), (2/2), (4/1), .. (4/4), (8/1), .. (8/8), (16/1), .. (16/16),....)	

9.2.3.19a TDD Channelisation Code LCR

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In 1.28Mcps TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code, that can have a spreading factor of 1, 2, 4, 8 or 16 and there is a choice between QPSK and 8PSK modulation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Channelisation Code			9.2.3.19 ENUMERATED ((1/1), (2/1), (2/2), (4/1), .. (4/4), (8/1), .. (8/8), (16/1), .. (16/16),....)	
Modulation			ENUMERATED (QPSK, 8PSK,...)	Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD

9.2.3.19A TDD DPCH Offset

The Offset represents the phase information for the allocation of a group of dedicated physical channels. The first range is used when a starting offset is not required and the TDD Physical channel offset for each DPCH in the CCTrCH shall be directly determined from the TDD DPCH Offset. The second range is used when a starting offset is required. The TDD DPCH Offset shall map to the CFN and the TDD Physical Channel Offset for each DPCH in this CCTrCH shall be calculated by TDD DPCH Offset *mod* Repetition period, see ref. [18].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TDD-DPCH Offset			CHOICE INTEGER (0..63) or INTEGER (0..255)	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Offset Type				
>Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER (0..255)	
>No Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER (0..63)	

9.2.3.19B TDD DL Code Information

The *TDD DL Code Information* IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
TDD DL Code Information		$1..<maxno\ of\ DPCHs>$ $1..$ $<maxno\ Of\ DPCH>$		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code	M		9.2.3.19	

Range Bound	Explanation
$maxno\ Of\ DPCHs$	Maximum number of DPCHs in one CTrCH

9.2.3.19C TDD DL Code Information LCR

The *TDD DL Code Information LCR* IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
TDD DL Code Information LCR		$1..<maxno\ of\ DPCHs\ L\ CR>$ $1..$ $<maxno\ Of\ DPCH\ LCR>$ >		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code LCR	M		9.2.3.19a	

Range Bound	Explanation
$maxno\ of\ DPCHs\ LCR\ maxno\ Of\ DPCH\ LCR$	Maximum number of DPCH in one CTrCH for 1.28Mcps TDD

9.2.3.20 TDD Physical Channel Offset

The Offset represents the phase information for the allocation of a physical channel. (SFN mod Repetition Period = Offset) see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Physical Channel Offset			INTEGER (0..63)	

9.2.3.21 TDD TPC DL Step Size

This parameter indicates step size for the DL power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Downlink Step Size			ENUMERATED (1, 2, 3,...)	

9.2.3.21A TDD UL Code Information

The *TDD UL Code Information* IE provides information for UL Code to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
TDD UL Code Information		$1..<maxno\ ofDPCHs>$ $1..$ $<maxnoOf\ DPCH>$		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code	M		9.2.3.19	

Range Bound	Explanation
$MmaxnoOfDPCHs$	Maximum number of DPCHs in one CCTrCH

9.2.3.21B TDD UL Code Information LCR

The *TDD UL Code Information LCR* IE provides information for UL Code to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
TDD UL Code Information LCR		$1..<maxno\ ofDPCHsL\ CR>1..$ $<maxnoOf\ DPCHLCR\ >$		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code LCR	M		9.2.3.19a	

Range Bound	Explanation
$MmaxnoOfDPCHsLCR$	Maximum number of DPCHs in one CCTrCH for 1.28Mcps TDD.

9.2.3.22 TFCI Coding

The TFCI Coding describes the way how the TFCI bits are coded. By default 1 TFCI bit is coded with 4 bits, 2 TFCI bits are coded with 8 bits, 3-5 TFCI bits are coded with 16 bits and 6-10 TFCI bits are coded with 32 bits.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Coding			Enumerated ENUMERATED (4, 8, 16, 32,...)	

9.2.3.22a Timing Adjustment Value

The *Timing Adjustment Value* IE indicates the timing correction within a Frame. Type 1 is used for the initial phase of Node B synchronisation. Type 2 is used for the steady-state phase of Node B synchronisation.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Timing Adjustment value			CHOICE INTEGER (0..255) or INTEGER (0..1048575)	According to mapping in [23]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Phase				According to mapping in [23]
>Initial Phase				
>>Timing Adjustment Value	M		INTEGER (0..255)	
>Steady State Phase				
>>Timing Adjustment Value	M		INTEGER (0..1048575)	

9.2.3.22A Timing Advance Applied

Defines the need for Rx Timing Deviation measurement results to be reported in a particular cell.

For 1.28Mcps TDD, this IE **mustshall** be set to "No".

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timing Advance Applied			ENUMERATED (Yes, No)	

9.2.3.23 Time Slot

The Time Slot represents the minimum time interval inside a Radio Frame that can be assigned to a Physical Channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot			INTEGER (0..14)	

9.2.3.24 Time Slot Direction

This parameter indicates whether the TS in the cell is used in Uplink or Downlink direction.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot Direction			Enumerated <u>ENUMERATED</u> (UL, DL, ...)	

9.2.3.24A Time Slot LCR

The Time Slot LCR is the number of the traffic_time slot_ within a 5 ms subframe of LCR TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot LCR			INTEGER (0..6)	

9.2.3.25 Time Slot Status

This parameter indicates whether the TS in the cell is active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot Status			Enumerated <u>ENUMERATED</u> (aActive, nNot_Active, ...)	

9.2.3.26 Transmission Diversity Applied

Defines if Transmission Diversity on DCHs is to be applied in a cell (see ref. [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Diversity Applied			Boolean <u>BOOLEAN</u>	True: Transmission Diversity shall be applied in this Cell. False: Transmission Diversity shall not be applied in this Cell.

9.2.3.26A UL Timeslot ISCP

UL Timeslot ISCP is the measured interference in a uplink timeslot at the Node B, see ref. [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot ISCP			INTEGER (0..127)	According to mapping in [23].

9.2.3.26B UL PhysCH SF Variation

Indicates whether variation of SF in UL is supported by Radio Link or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL PhysCH SF Variation			ENUMERATED (SF_Variation_supported, SF_Variation_NOT_supported)	

9.2.3.26C UL Timeslot Information

The *UL Timeslot Information* IE provides information on the time slot allocation for an UL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
UL Timeslot Information		<i>1..<maxno ofULts>1..<maxno of ULts></i>		
>Time Slot	M		9.2.3.23	
>Midamble Shift and Burst Type	M		9.2.3.7	
>TFCI Presence	M		9.2.1.57	
>UL Code Information	M		TDD UL Code Information 9.2.3.21A	

Range Bound	Explanation
<i>Mmaxno ofULts</i>	Maximum number of Uplink time slots per Radio Link

9.2.3.26D UL Time Slot ISCP Info

The *UL Time Slot ISCP Info* IE provides information for UL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Descriptions
UL Time Slot ISCP Info		<i>1..<maxno ofULts>1..<maxno of ULts></i>		
>Time Slot	M		9.2.3.23	
>UL Timeslot ISCP	M		9.2.3.26A	

Range Bound	Explanation
<i>Mmaxno ofULts</i>	Maximum number of Uplink time slots per Radio Link

9.2.3.26E UL Timeslot Information LCR

The *UL Timeslot Information* IE provides information on the time slot allocation for an UL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
UL Timeslot Information LCR		<i>1..<maxno of ULtsLCR> ≥1.. <Maxnoof ULtsLCR></i>		
>Time Slot LCR	M		9.2.3.24A	
>Midamble Shift LCR	M		9.2.3.7A	
>TFCI Presence	M		9.2.1.57	
>UL Code Information	M		TDD UL Code Information LCR 9.2.3.21B	

Range Bound	Explanation
<i>MmaxnoofULtsLCR</i>	Maximum number of Uplink time slots per Radio Link for 1.28Mcps TDD.

9.2.3.26F UL Time Slot ISCP Info LCR

The *UL Time Slot ISCP Info LCR* IE provides information for UL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Descriptions
UL Time Slot ISCP Info LCR		<i>1..<maxno of ULtsLCR> ≥1.. <Maxnoof ULtsLCR></i>		
>Time Slot LCR	M		9.2.3.24A	
>UL Timeslot ISCP	M		9.2.3.26A	

Range Bound	Explanation
<i>MmaxnoofULtsLCR</i>	Maximum number of Uplink time slots per Radio Link for 1.28Mcps TDD

9.2.3.27 USCH ID

The USCH ID uniquely identifies a USCH within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics and Description
USCH ID			INTEGER (0..255)	

9.2.3.28 USCH Information

The *USCH Information* IE provides information for USCHs to be established.

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Descriptions	Criticality	Assigned Criticality
USCH Information		$1..<maxnoofUSCHs> \uparrow$ to $<MaxnoofUSCHs>$			–	
>USCH ID	M		9.2.3.27		–	
>CCTrCH ID	M		9.2.3.3	UL CCTrCH in which the USCH is mapped	–	
>Transport Format Set	M		9.2.1.59	For USCH	–	
>Allocation/Retention Priority	M		9.2.1.1A		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore

Range \uparrow Bound	Explanation
$MmaxnoofUSCHs$	Maximum number of USCHs for one UE

9.2.3.29 USCH Information Response

The *USCH Information Response* IE provides information for USCHs that have been established or modified.

IE/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Descriptions
USCH Information Response		$1..<maxnoofUSCHs> \uparrow$ $1..$ $<MaxnoofUSCHs>$		
>USCH ID	M		9.2.3.27	
>Binding ID	O		9.2.1.4	
>Transport Layer Address	O		9.2.1.63	

Range \uparrow Bound	Explanation
$MmaxnoofUSCHs$	Maximum number of USCHs for one UE

9.2.3.30 SCTD Indicator

Indicates if SCTD antenna diversity is applied or not to the PCCPCH and PICH [3.84Mcps TDD].

Information Element/Group Name	Presence	Range	IE \uparrow Type and \uparrow Reference	Semantics \uparrow Description
SCTD Indicator			ENUMERATED_(active, inactive)	

9.3 Message and Information eElement aAbstract sSyntax (with ASN.1)

9.3.0 General

Subclause 9.3 presents the Abstract Syntax of NBAP protocol with ASN.1. In case there is contradiction between the ASN.1 definition in this subclause and the tabular format in subclauses 9.1 and 9.2, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, where the tabular format shall take precedence.

The ASN.1 definition specifies the structure and content of NBAP messages. NBAP messages can contain any IEs specified in the object set definitions for that message without the order or number of occurrence being restricted by ASN.1. However, for this version of the standard, a sending entity shall construct a NBAP message according to the PDU definitions module and with the following additional rules (Note that in the following IE means an IE in the object set with an explicit id. If one IE needed to appear more than once in one object set, then the different occurrences have different IE ids):

- IEs shall be ordered (in an IE container) in the order they appear in object set definitions.
- Object set definitions specify how many times IEs may appear. An IE shall appear exactly once if the presence field in an object has value "mandatory". An IE may appear at most once if the presence field in an object has value "optional" or "conditional". If in a tabular format there is multiplicity specified for an IE (i.e. an IE list) then in the corresponding ASN.1 definition the list definition is separated into two parts. The first part defines an IE container list where the list elements reside. The second part defines list elements. The IE container list appears as an IE of its own. For this version of the standard an IE container list may contain only one kind of list elements.

If a NBAP message that is not constructed as defined above is received, this shall be considered as Abstract Syntax Error, and the message shall be handled as defined for Abstract Syntax Error in subclause 10.3.6.

9.3.1 Usage of Private Message mechanism for non-standard use

The private message mechanism for non-standard use may be used

- For special operator- (and/or vendor) specific features considered not to be part of the basic functionality, i.e. the functionality required for a complete and high-quality specification in order to guarantee multi-vendor inter-operability.
- By vendors for research purposes, e.g. to implement and evaluate new algorithms/features before such features are proposed for standardisation

The private message mechanism shall not be used for basic functionality. Such functionality shall be standardised.

9.3.2 Elementary Procedure Definitions

```
-- *****
--
-- Elementary Procedure definitions
--
-- *****
```

```
NBAP-PDU-Descriptions {  
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)  
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Descriptions (0) }
```

```
DEFINITIONS AUTOMATIC TAGS ::=
```

```
BEGIN
```

```
-- *****  
--  
-- IE parameter types from other modules.  
--  
-- *****
```

```
IMPORTS
```

```
    Criticality,  
    ProcedureID,  
    MessageDiscriminator,  
    TransactionID
```

```
FROM NBAP-CommonDataTypes
```

```
    CommonTransportChannelSetupRequestFDD,  
    CommonTransportChannelSetupRequestTDD,  
    CommonTransportChannelSetupResponse,  
    CommonTransportChannelSetupFailure,  
    CommonTransportChannelReconfigurationRequestFDD,  
    CommonTransportChannelReconfigurationRequestTDD,  
    CommonTransportChannelReconfigurationResponse,  
    CommonTransportChannelReconfigurationFailure,  
    CommonTransportChannelDeletionRequest,  
    CommonTransportChannelDeletionResponse,  
    BlockResourceRequest,  
    BlockResourceResponse,  
    BlockResourceFailure,  
    UnblockResourceIndication,  
    AuditFailure,  
    AuditRequiredIndication,  
    AuditRequest,  
    AuditResponse,  
    CommonMeasurementInitiationRequest,  
    CommonMeasurementInitiationResponse,  
    CommonMeasurementInitiationFailure,  
    CommonMeasurementReport,  
    CommonMeasurementTerminationRequest,  
    CommonMeasurementFailureIndication,  
    CellSetupRequestFDD,  
    CellSetupRequestTDD,  
    CellSetupResponse,  
    CellSetupFailure,  
    CellReconfigurationRequestFDD,  
    CellReconfigurationRequestTDD,  
    CellReconfigurationResponse,
```

CellReconfigurationFailure,
CellDeletionRequest,
CellDeletionResponse,
InformationExchangeInitiationRequest,
InformationExchangeInitiationResponse,
InformationExchangeInitiationFailure,
InformationReport,
InformationExchangeTerminationRequest,
InformationExchangeFailureIndication,
BearerRearrangementIndication,
ResourceStatusIndication,
SystemInformationUpdateRequest,
SystemInformationUpdateResponse,
SystemInformationUpdateFailure,
ResetRequest,
ResetResponse,
RadioLinkActivationCommandFDD,
RadioLinkActivationCommandTDD,
RadioLinkPreemptionRequiredIndication,
RadioLinkSetupRequestFDD,
RadioLinkSetupRequestTDD,
RadioLinkSetupResponseFDD,
RadioLinkSetupResponseTDD,
RadioLinkSetupFailureFDD,
RadioLinkSetupFailureTDD,
RadioLinkAdditionRequestFDD,
RadioLinkAdditionRequestTDD,
RadioLinkAdditionResponseFDD,
RadioLinkAdditionResponseTDD,
RadioLinkAdditionFailureFDD,
RadioLinkAdditionFailureTDD,
RadioLinkReconfigurationPrepareFDD,
RadioLinkReconfigurationPrepareTDD,
RadioLinkReconfigurationReady,
RadioLinkReconfigurationFailure,
RadioLinkReconfigurationCommit,
RadioLinkReconfigurationCancel,
RadioLinkReconfigurationRequestFDD,
RadioLinkReconfigurationRequestTDD,
RadioLinkReconfigurationResponse,
RadioLinkDeletionRequest,
RadioLinkDeletionResponse,
DL-PowerControlRequest,
DL-PowerTimeslotControlRequest,
DedicatedMeasurementInitiationRequest,
DedicatedMeasurementInitiationResponse,
DedicatedMeasurementInitiationFailure,
DedicatedMeasurementReport,
DedicatedMeasurementTerminationRequest,
DedicatedMeasurementFailureIndication,
RadioLinkFailureIndication,
RadioLinkRestoreIndication,
CompressedModeCommand,

ErrorIndication,
PrivateMessage,
PhysicalSharedChannelReconfigurationRequestTDD,
PhysicalSharedChannelReconfigurationRequestFDD,
PhysicalSharedChannelReconfigurationResponse,
PhysicalSharedChannelReconfigurationFailure,
CellSynchronisationInitiationRequestTDD,
CellSynchronisationInitiationResponseTDD,
CellSynchronisationInitiationFailureTDD,
CellSynchronisationReconfigurationRequestTDD,
CellSynchronisationReconfigurationResponseTDD,
CellSynchronisationReconfigurationFailureTDD,
CellSynchronisationAdjustmentRequestTDD,
CellSynchronisationAdjustmentResponseTDD,
CellSynchronisationAdjustmentFailureTDD,
CellSynchronisationReportTDD,
CellSynchronisationTerminationRequestTDD,
CellSynchronisationFailureIndicationTDD

FROM NBAP-PDU-Contents

id-audit,
id-auditRequired,
id-blockResource,
id-cellDeletion,
id-cellReconfiguration,
id-cellSetup,
id-cellSynchronisationInitiation,
id-cellSynchronisationReconfiguration,
id-cellSynchronisationReporting,
id-cellSynchronisationTermination,
id-cellSynchronisationFailure,
id-commonMeasurementFailure,
id-commonMeasurementInitiation,
id-commonMeasurementReport,
id-commonMeasurementTermination,
id-commonTransportChannelDelete,
id-commonTransportChannelReconfigure,
id-commonTransportChannelSetup,
id-compressedModeCommand,
id-dedicatedMeasurementFailure,
id-dedicatedMeasurementInitiation,
id-dedicatedMeasurementReport,
id-dedicatedMeasurementTermination,
id-downlinkPowerControl,
id-downlinkPowerTimeslotControl,
id-errorIndicationForDedicated,
id-errorIndicationForCommon,
id-informationExchangeFailure,
id-informationExchangeInitiation,
id-informationReporting,
id-informationExchangeTermination,
id-BearerRearrangement,
id-physicalSharedChannelReconfiguration,

```

    id-privateMessageForDedicated,
    id-privateMessageForCommon,
    id-radioLinkActivation,
    id-radioLinkAddition,
    id-radioLinkDeletion,
    id-radioLinkFailure,
    id-radioLinkPreemption,
    id-radioLinkRestoration,
    id-radioLinkSetup,
    id-reset,
    id-resourceStatusIndication,
    id-cellSynchronisationAdjustment,
    id-synchronisedRadioLinkReconfigurationCancellation,
    id-synchronisedRadioLinkReconfigurationCommit,
    id-synchronisedRadioLinkReconfigurationPreparation,
    id-systemInformationUpdate,
    id-unblockResource,
    id-unSynchronisedRadioLinkReconfiguration
FROM NBAP-Constants;

-- *****
--
-- Interface Elementary Procedure Class
--
-- *****

NBAP-ELEMENTARY-PROCEDURE ::= CLASS {
    &InitiatingMessage          ,
    &SuccessfulOutcome          OPTIONAL,
    &UnsuccessfulOutcome        OPTIONAL,
    &Outcome                    OPTIONAL,
    &messageDiscriminator        MessageDiscriminator,
    &procedureID                 ProcedureID    UNIQUE,
    &criticality                  Criticality    DEFAULT ignore
}

WITH SYNTAX {
    INITIATING MESSAGE          &InitiatingMessage
    [SUCCESSFUL OUTCOME         &SuccessfulOutcome]
    [UNSUCCESSFUL OUTCOME       &UnsuccessfulOutcome]
    [OUTCOME                     &Outcome]
    MESSAGE DISCRIMINATOR       &messageDiscriminator
    PROCEDURE ID                 &procedureID
    [CRITICALITY                 &criticality]
}

-- *****
--
-- Interface PDU Definition
--
-- *****

NBAP-PDU ::= CHOICE {

```



```

    initiatingMessage      InitiatingMessage,
    succesfulOutcome      SuccessfulOutcome,
    unsuccessfulOutcome    UnsuccessfulOutcome,
    outcome                Outcome,
    ...
}

InitiatingMessage ::= SEQUENCE {
    procedureID            NBAP-ELEMENTARY-PROCEDURE.&procedureID   ( {NBAP-ELEMENTARY-PROCEDURES} ),
    criticality            NBAP-ELEMENTARY-PROCEDURE.&criticality   ( {NBAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
    messageDiscriminator  NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator ( {NBAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
    transactionID         TransactionID,
    value                  NBAP-ELEMENTARY-PROCEDURE.&InitiatingMessage ( {NBAP-ELEMENTARY-PROCEDURES} {@procedureID} )
}

SuccessfulOutcome ::= SEQUENCE {
    procedureID            NBAP-ELEMENTARY-PROCEDURE.&procedureID   ( {NBAP-ELEMENTARY-PROCEDURES} ),
    criticality            NBAP-ELEMENTARY-PROCEDURE.&criticality   ( {NBAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
    messageDiscriminator  NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator ( {NBAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
    transactionID         TransactionID,
    value                  NBAP-ELEMENTARY-PROCEDURE.&SuccessfulOutcome ( {NBAP-ELEMENTARY-PROCEDURES} {@procedureID} )
}

UnsuccessfulOutcome ::= SEQUENCE {
    procedureID            NBAP-ELEMENTARY-PROCEDURE.&procedureID   ( {NBAP-ELEMENTARY-PROCEDURES} ),
    criticality            NBAP-ELEMENTARY-PROCEDURE.&criticality   ( {NBAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
    messageDiscriminator  NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator ( {NBAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
    transactionID         TransactionID,
    value                  NBAP-ELEMENTARY-PROCEDURE.&UnsuccessfulOutcome ( {NBAP-ELEMENTARY-PROCEDURES} {@procedureID} )
}

Outcome ::= SEQUENCE {
    procedureID            NBAP-ELEMENTARY-PROCEDURE.&procedureID   ( {NBAP-ELEMENTARY-PROCEDURES} ),
    criticality            NBAP-ELEMENTARY-PROCEDURE.&criticality   ( {NBAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
    messageDiscriminator  NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator ( {NBAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
    transactionID         TransactionID,
    value                  NBAP-ELEMENTARY-PROCEDURE.&Outcome      ( {NBAP-ELEMENTARY-PROCEDURES} {@procedureID} )
}

-- *****
--
-- Interface Elementary Procedure List
--
-- *****

NBAP-ELEMENTARY-PROCEDURES NBAP-ELEMENTARY-PROCEDURE ::= {
    NBAP-ELEMENTARY-PROCEDURES-CLASS-1      |
    NBAP-ELEMENTARY-PROCEDURES-CLASS-2      |
    ...
}

NBAP-ELEMENTARY-PROCEDURES-CLASS-1 NBAP-ELEMENTARY-PROCEDURE ::= {
    cellSetupFDD                            |

```

```

cellSetupTDD
cellReconfigurationFDD
cellReconfigurationTDD
cellDeletion
commonTransportChannelSetupFDD
commonTransportChannelSetupTDD
commonTransportChannelReconfigureFDD
commonTransportChannelReconfigureTDD
commonTransportChannelDelete
audit
blockResource
radioLinkSetupFDD
radioLinkSetupTDD
systemInformationUpdate
commonMeasurementInitiation
radioLinkAdditionFDD
radioLinkAdditionTDD
radioLinkDeletion
reset
synchronisedRadioLinkReconfigurationPreparationFDD
synchronisedRadioLinkReconfigurationPreparationTDD
unsynchronisedRadioLinkReconfigurationFDD
unsynchronisedRadioLinkReconfigurationTDD
dedicatedMeasurementInitiation
physicalSharedChannelReconfigurationTDD
...
informationExchangeInitiation
cellSynchronisationInitiationTDD
cellSynchronisationReconfigurationTDD
cellSynchronisationAdjustmentTDD
physicalSharedChannelReconfigurationFDD
}

NBAP-ELEMENTARY-PROCEDURES-CLASS-2 NBAP-ELEMENTARY-PROCEDURE ::= {
resourceStatusIndication
auditRequired
commonMeasurementReport
commonMeasurementTermination
commonMeasurementFailure
synchronisedRadioLinkReconfigurationCommit
synchronisedRadioLinkReconfigurationCancellation
radioLinkFailure
radioLinkPreemption
radioLinkRestoration
dedicatedMeasurementReport
dedicatedMeasurementTermination
dedicatedMeasurementFailure
downlinkPowerControlFDD
downlinkPowerTimeslotControl
compressedModeCommand
unblockResource
errorIndicationForDedicated
errorIndicationForCommon

```

```

privateMessageForDedicated      |
privateMessageForCommon        |
...                              |
informationReporting            |
informationExchangeTermination  |
informationExchangeFailure     |
cellSynchronisationReportingTDD |
cellSynchronisationTerminationTDD |
cellSynchronisationFailureTDD  |
BearerRearrangement           |
radioLinkActivationFDD        |
radioLinkActivationTDD        |
}

-- *****
--
-- Interface Elementary Procedures
--
-- *****

-- Class 1

-- *** CellSetup (FDD) ***
cellSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellSetupRequestFDD
    SUCCESSFUL OUTCOME      CellSetupResponse
    UNSUCCESSFUL OUTCOME    CellSetupFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-cellSetup, ddMode fdd }
    CRITICALITY             reject
}

-- *** CellSetup (TDD) ***
cellSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellSetupRequestTDD
    SUCCESSFUL OUTCOME      CellSetupResponse
    UNSUCCESSFUL OUTCOME    CellSetupFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-cellSetup, ddMode tdd }
    CRITICALITY             reject
}

-- *** CellReconfiguration(FDD) ***
cellReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellReconfigurationRequestFDD
    SUCCESSFUL OUTCOME      CellReconfigurationResponse
    UNSUCCESSFUL OUTCOME    CellReconfigurationFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-cellReconfiguration, ddMode fdd }
    CRITICALITY             reject
}

-- *** CellReconfiguration(TDD) ***

```

```

cellReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellReconfigurationRequestTDD
    SUCCESSFUL OUTCOME      CellReconfigurationResponse
    UNSUCCESSFUL OUTCOME    CellReconfigurationFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-cellReconfiguration, ddMode tdd }
    CRITICALITY             reject
}

-- *** CellDeletion ***
cellDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellDeletionRequest
    SUCCESSFUL OUTCOME      CellDeletionResponse
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-cellDeletion, ddMode common }
    CRITICALITY             reject
}

-- *** CommonTransportChannelSetup (FDD) ***
commonTransportChannelSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonTransportChannelSetupRequestFDD
    SUCCESSFUL OUTCOME      CommonTransportChannelSetupResponse
    UNSUCCESSFUL OUTCOME    CommonTransportChannelSetupFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonTransportChannelSetup, ddMode fdd }
    CRITICALITY             reject
}

-- *** CommonTransportChannelSetup (TDD) ***
commonTransportChannelSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonTransportChannelSetupRequestTDD
    SUCCESSFUL OUTCOME      CommonTransportChannelSetupResponse
    UNSUCCESSFUL OUTCOME    CommonTransportChannelSetupFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonTransportChannelSetup, ddMode tdd }
    CRITICALITY             reject
}

-- *** CommonTransportChannelReconfigure (FDD) ***
commonTransportChannelReconfigureFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonTransportChannelReconfigurationRequestFDD
    SUCCESSFUL OUTCOME      CommonTransportChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME    CommonTransportChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonTransportChannelReconfigure, ddMode fdd }
    CRITICALITY             reject
}

-- *** CommonTransportChannelReconfigure (TDD) ***
commonTransportChannelReconfigureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonTransportChannelReconfigurationRequestTDD
    SUCCESSFUL OUTCOME      CommonTransportChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME    CommonTransportChannelReconfigurationFailure

```

```

MESSAGE DISCRIMINATOR    common
PROCEDURE ID             { procedureCode id-commonTransportChannelReconfigure, ddMode tdd }
CRITICALITY              reject
}

-- *** CommonTransportChannelDelete ***
commonTransportChannelDelete NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CommonTransportChannelDeletionRequest
  SUCCESSFUL OUTCOME       CommonTransportChannelDeletionResponse
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-commonTransportChannelDelete, ddMode common }
  CRITICALITY              reject
}

-- *** Audit ***
audit NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      AuditRequest
  SUCCESSFUL OUTCOME       AuditResponse
  UNSUCCESSFUL OUTCOME    AuditFailure
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-audit, ddMode common }
  CRITICALITY              reject
}

-- *** BlockResourceRequest ***
blockResource NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      BlockResourceRequest
  SUCCESSFUL OUTCOME       BlockResourceResponse
  UNSUCCESSFUL OUTCOME    BlockResourceFailure
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-blockResource, ddMode common }
  CRITICALITY              reject
}

-- *** RadioLinkSetup (FDD) ***
radioLinkSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkSetupRequestFDD
  SUCCESSFUL OUTCOME       RadioLinkSetupResponseFDD
  UNSUCCESSFUL OUTCOME    RadioLinkSetupFailureFDD
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-radioLinkSetup, ddMode fdd }
  CRITICALITY              reject
}

-- *** RadioLinkSetup (TDD) ***
radioLinkSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkSetupRequestTDD
  SUCCESSFUL OUTCOME       RadioLinkSetupResponseTDD
  UNSUCCESSFUL OUTCOME    RadioLinkSetupFailureTDD
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-radioLinkSetup, ddMode tdd }
  CRITICALITY              reject
}

```

```
-- *** SystemInformationUpdate ***
systemInformationUpdate NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      SystemInformationUpdateRequest
    SUCCESSFUL OUTCOME      SystemInformationUpdateResponse
    UNSUCCESSFUL OUTCOME    SystemInformationUpdateFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-systemInformationUpdate, ddMode common }
    CRITICALITY             reject
}

-- *** Reset ***
reset NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      ResetRequest
    SUCCESSFUL OUTCOME      ResetResponse
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-reset, ddMode common }
    CRITICALITY             reject
}

-- *** CommonMeasurementInitiation ***
commonMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonMeasurementInitiationRequest
    SUCCESSFUL OUTCOME      CommonMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME    CommonMeasurementInitiationFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonMeasurementInitiation, ddMode common }
    CRITICALITY             reject
}

-- *** RadioLinkAddition (FDD) ***
radioLinkAdditionFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkAdditionRequestFDD
    SUCCESSFUL OUTCOME      RadioLinkAdditionResponseFDD
    UNSUCCESSFUL OUTCOME    RadioLinkAdditionFailureFDD
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkAddition, ddMode fdd }
    CRITICALITY             reject
}

-- *** RadioLinkAddition (TDD) ***
radioLinkAdditionTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkAdditionRequestTDD
    SUCCESSFUL OUTCOME      RadioLinkAdditionResponseTDD
    UNSUCCESSFUL OUTCOME    RadioLinkAdditionFailureTDD
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkAddition, ddMode tdd }
    CRITICALITY             reject
}

-- *** RadioLinkDeletion ***
radioLinkDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkDeletionRequest
```

```

    SUCCESSFUL OUTCOME      RadioLinkDeletionResponse
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkDeletion, ddMode common }
    CRITICALITY             reject
}

-- *** SynchronisedRadioLinkReconfigurationPreparation (FDD) ***
synchronisedRadioLinkReconfigurationPreparationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationPrepareFDD
    SUCCESSFUL OUTCOME      RadioLinkReconfigurationReady
    UNSUCCESSFUL OUTCOME    RadioLinkReconfigurationFailure
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
    CRITICALITY             reject
}

-- *** SynchronisedRadioLinkReconfigurationPreparation (TDD) ***
synchronisedRadioLinkReconfigurationPreparationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationPrepareTDD
    SUCCESSFUL OUTCOME      RadioLinkReconfigurationReady
    UNSUCCESSFUL OUTCOME    RadioLinkReconfigurationFailure
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
    CRITICALITY             reject
}

-- *** UnSynchronisedRadioLinkReconfiguration (FDD) ***
unSynchronisedRadioLinkReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationRequestFDD
    SUCCESSFUL OUTCOME      RadioLinkReconfigurationResponse
    UNSUCCESSFUL OUTCOME    RadioLinkReconfigurationFailure
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
    CRITICALITY             reject
}

-- *** UnSynchronisedRadioLinkReconfiguration (TDD) ***
unSynchronisedRadioLinkReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationRequestTDD
    SUCCESSFUL OUTCOME      RadioLinkReconfigurationResponse
    UNSUCCESSFUL OUTCOME    RadioLinkReconfigurationFailure
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
    CRITICALITY             reject
}

-- *** DedicatedMeasurementInitiation ***
dedicatedMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      DedicatedMeasurementInitiationRequest
    SUCCESSFUL OUTCOME      DedicatedMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME    DedicatedMeasurementInitiationFailure
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-dedicatedMeasurementInitiation, ddMode common }
}

```

```

    CRITICALITY          reject
}

-- *** PhysicalSharedChannelReconfiguration (FDD) ***
physicalSharedChannelReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE   PhysicalSharedChannelReconfigurationRequestFDD
    SUCCESSFUL OUTCOME   PhysicalSharedChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME PhysicalSharedChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID         { procedureCode id-physicalSharedChannelReconfiguration, ddMode fdd }
    CRITICALITY          reject
}

-- *** PhysicalSharedChannelReconfiguration (TDD) ***
physicalSharedChannelReconfiguration NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE   PhysicalSharedChannelReconfigurationRequestTDD
    SUCCESSFUL OUTCOME   PhysicalSharedChannelReconfigurationResponseTDD
    UNSUCCESSFUL OUTCOME PhysicalSharedChannelReconfigurationFailureTDD
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID         { procedureCode id-physicalSharedChannelReconfiguration, ddMode tdd }
    CRITICALITY          reject
}

--*** InformationExchangeInitiation ***
informationExchangeInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE   InformationExchangeInitiationRequest
    SUCCESSFUL OUTCOME   InformationExchangeInitiationResponse
    UNSUCCESSFUL OUTCOME InformationExchangeInitiationFailure
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID         { procedureCode id-informationExchangeInitiation, ddMode common }
    CRITICALITY          reject
}

-- *** CellSynchronisationInitiation (TDD only) ***
cellSynchronisationInitiationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE   CellSynchronisationInitiationRequestTDD
    SUCCESSFUL OUTCOME   CellSynchronisationInitiationResponseTDD
    UNSUCCESSFUL OUTCOME CellSynchronisationInitiationFailureTDD
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID         { procedureCode id-cellSynchronisationInitiation, ddMode tdd }
    CRITICALITY          reject
}

-- *** CellSynchronisationReconfiguration (TDD only) ***
cellSynchronisationReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE   CellSynchronisationReconfigurationRequestTDD
    SUCCESSFUL OUTCOME   CellSynchronisationReconfigurationResponseTDD
    UNSUCCESSFUL OUTCOME CellSynchronisationReconfigurationFailureTDD
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID         { procedureCode id-cellSynchronisationReconfiguration, ddMode tdd }
    CRITICALITY          reject
}

```



```
-- *** CellSynchronisationAdjustment (TDD only) ***
cellSynchronisationAdjustmentTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    CellSynchronisationAdjustmentRequestTDD
  SUCCESSFUL OUTCOME    CellSynchronisationAdjustmentResponseTDD
  UNSUCCESSFUL OUTCOME  CellSynchronisationAdjustmentFailureTDD
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-cellSynchronisationAdjustment, ddMode tdd }
  CRITICALITY           reject
}

-- Class 2

-- *** ResourceStatusIndication ***
resourceStatusIndication NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    ResourceStatusIndication
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-resourceStatusIndication, ddMode common }
  CRITICALITY           ignore
}

-- *** AuditRequired ***
auditRequired NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    AuditRequiredIndication
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-auditRequired, ddMode common }
  CRITICALITY           ignore
}

-- *** CommonMeasurementReport ***
commonMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    CommonMeasurementReport
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-commonMeasurementReport, ddMode common }
  CRITICALITY           ignore
}

-- *** CommonMeasurementTermination ***
commonMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    CommonMeasurementTerminationRequest
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-commonMeasurementTermination, ddMode common }
  CRITICALITY           ignore
}

-- *** CommonMeasurementFailure ***
commonMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    CommonMeasurementFailureIndication
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-commonMeasurementFailure, ddMode common }
  CRITICALITY           ignore
}

-- *** SynchronisedRadioLinkReconfigurationCommit ***
```

```
synchronisedRadioLinkReconfigurationCommit NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationCommit
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
    CRITICALITY             ignore
}

-- *** SynchronisedRadioReconfigurationCancellation ***
synchronisedRadioLinkReconfigurationCancellation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationCancel
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common }
    CRITICALITY             ignore
}

-- *** RadioLinkFailure ***
radioLinkFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkFailureIndication
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkFailure, ddMode common }
    CRITICALITY             ignore
}

-- *** RadioLinkPreemption ***
radioLinkPreemption NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkPreemptionRequiredIndication
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkPreemption, ddMode common }
    CRITICALITY             ignore
}

-- *** RadioLinkRestoration ***
radioLinkRestoration NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkRestoreIndication
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkRestoration, ddMode common }
    CRITICALITY             ignore
}

-- *** DedicatedMeasurementReport ***
dedicatedMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      DedicatedMeasurementReport
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-dedicatedMeasurementReport, ddMode common }
    CRITICALITY             ignore
}

-- *** DedicatedMeasurementTermination ***
dedicatedMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      DedicatedMeasurementTerminationRequest
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-dedicatedMeasurementTermination, ddMode common }
    CRITICALITY             ignore
}
```

```
}

-- *** DedicatedMeasurementFailure ***
dedicatedMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    DedicatedMeasurementFailureIndication
    MESSAGE DISCRIMINATOR dedicated
    PROCEDURE ID          { procedureCode id-dedicatedMeasurementFailure, ddMode common }
    CRITICALITY           ignore
}

-- *** DLPowerControl (FDD only) ***
downlinkPowerControlFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    DL-PowerControlRequest
    MESSAGE DISCRIMINATOR dedicated
    PROCEDURE ID          { procedureCode id-downlinkPowerControl, ddMode fdd }
    CRITICALITY           ignore
}

-- *** DLPowerTimeslotControl (TDD only) ***
downlinkPowerTimeslotControl NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    DL-PowerTimeslotControlRequest
    MESSAGE DISCRIMINATOR dedicated
    PROCEDURE ID          { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
    CRITICALITY           ignore
}

-- *** CompressedModeCommand (FDD only) ***
compressedModeCommand NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CompressedModeCommand
    MESSAGE DISCRIMINATOR dedicated
    PROCEDURE ID          { procedureCode id-compressedModeCommand, ddMode fdd }
    CRITICALITY           ignore
}

-- *** UnblockResourceIndication ***
unblockResource NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    UnblockResourceIndication
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-unblockResource, ddMode common }
    CRITICALITY           ignore
}

-- *** ErrorIndication for Dedicated procedures ***
errorIndicationForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    ErrorIndication
    MESSAGE DISCRIMINATOR dedicated
    PROCEDURE ID          { procedureCode id-errorIndicationForDedicated, ddMode common }
    CRITICALITY           ignore
}

-- *** ErrorIndication for Common procedures ***
errorIndicationForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    ErrorIndication
```

```
MESSAGE DISCRIMINATOR    common
PROCEDURE ID             { procedureCode id-errorIndicationForCommon, ddMode common }
CRITICALITY              ignore
}

-- *** CellSynchronisationReporting (TDD only) ***
cellSynchronisationReportingTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     CellSynchronisationReportTDD
  MESSAGE DISCRIMINATOR  common
  PROCEDURE ID           { procedureCode id-cellSynchronisationReporting, ddMode tdd }
  CRITICALITY            ignore
}

-- *** CellSynchronisationTermination (TDD only) ***
cellSynchronisationTerminationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     CellSynchronisationTerminationRequestTDD
  MESSAGE DISCRIMINATOR  common
  PROCEDURE ID           { procedureCode id-cellSynchronisationTermination, ddMode tdd }
  CRITICALITY            ignore
}

-- *** CellSynchronisationFailure (TDD only) ***
cellSynchronisationFailureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     CellSynchronisationFailureIndicationTDD
  MESSAGE DISCRIMINATOR  common
  PROCEDURE ID           { procedureCode id-cellSynchronisationFailure, ddMode tdd }
  CRITICALITY            ignore
}

-- *** PrivateMessage for Dedicated procedures ***
privateMessageForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     PrivateMessage
  MESSAGE DISCRIMINATOR  dedicated
  PROCEDURE ID           { procedureCode id-privateMessageForDedicated, ddMode common }
  CRITICALITY            ignore
}

-- *** PrivateMessage for Common procedures ***
privateMessageForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     PrivateMessage
  MESSAGE DISCRIMINATOR  common
  PROCEDURE ID           { procedureCode id-privateMessageForCommon, ddMode common }
  CRITICALITY            ignore
}

-- *** InformationReporting ***
informationReporting NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE     InformationReport
  MESSAGE DISCRIMINATOR  common
  PROCEDURE ID           { procedureCode id-informationReporting, ddMode common }
  CRITICALITY            ignore
}
```

```

-- *** InformationExchangeTermination ***
informationExchangeTermination NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      InformationExchangeTerminationRequest
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-informationExchangeTermination, ddMode common }
  CRITICALITY             ignore
}

-- *** InformationExchangeFailure ***
informationExchangeFailure NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      InformationExchangeFailureIndication
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-informationExchangeFailure, ddMode common }
  CRITICALITY             ignore
}

-- *** BearerRearrangement ***
BearerRearrangement NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      BearerRearrangementIndication
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-BearerRearrangement, ddMode common }
  CRITICALITY             ignore
}

-- *** RadioLinkActivation (FDD) ***
radioLinkActivationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkActivationCommandFDD
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-radioLinkActivation, ddMode fdd }
  CRITICALITY             ignore
}

-- *** RadioLinkActivation (TDD) ***
radioLinkActivationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkActivationCommandTDD
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-radioLinkActivation, ddMode tdd }
  CRITICALITY             ignore
}

END

```

9.3.3 PDU Definitions

```

-- *****
--
-- PDU definitions for NBAP.
--
-- *****

```

```
NBAP-PDU-Contents {  
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)  
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }
```

```
DEFINITIONS AUTOMATIC TAGS ::=
```

```
BEGIN
```

```
-- *****  
--  
-- IE parameter types from other modules.  
--  
-- *****
```

```
IMPORTS
```

```
Active-Pattern-Sequence-Information,  
AddorDeleteIndicator,  
AICH-Power,  
AICH-TransmissionTiming,  
AllocationRetentionPriority,  
APPreambleSignature,  
APSubChannelNumber,  
AvailabilityStatus,  
BCCH-ModificationTime,  
BindingID,  
BlockingPriorityIndicator,  
SCTD-Indicator,  
Cause,  
CCTrCH-ID,  
CDSUBChannelNumbers,  
CellParameterID,  
CellSyncBurstAvailabilityIndicator,  
CellSyncBurstCode,  
CellSyncBurstCodeShift,  
CellSyncBurstRepetitionPeriod,  
CellSyncBurstSIR,  
CellSyncBurstTiming,  
CellSyncBurstTimingThreshold,  
CFN,  
Channel-Assignment-Indication,  
ChipOffset,  
C-ID,  
ClosedloopTimingAdjustmentMode,  
CommonChannelsCapacityConsumptionLaw,  
Compressed-Mode-Deactivation-Flag,  
CommonMeasurementAccuracy,  
CommonMeasurementType,  
CommonMeasurementValue,  
CommonMeasurementValueInformation,  
CommonPhysicalChannelID,  
Common-PhysicalChannel-Status-Information,  
Common-TransportChannel-Status-Information,  
CommonTransportChannelID,
```

CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue,
CriticalityDiagnostics,
CPCH-Allowed-Total-Rate,
CPCHScramblingCodeNumber,
CPCH-UL-DPCCH-SlotFormat,
CRNC-CommunicationContextID,
CSBMeasurementID,
CSBTransmissionID,
DCH-FDD-Information,
DCH-InformationResponse,
DCH-ID,
FDD-DCHs-to-Modify,
TDD-DCHs-to-Modify,
DCH-TDD-Information,
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DelayedActivation,
DelayedActivationUpdate,
DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-DPCH-TimingAdjustment,
DL-or-Global-CapacityCredit,
DL-Power,
DL-PowerBalancing-Information,
DL-PowerBalancing-ActivationIndicator,
DLPowerAveragingWindowSize,
DL-PowerBalancing-UpdatedIndicator,
DL-ScramblingCode,
DL-TimeslotISCP,
DL-Timeslot-Information,
DL-TimeslotLCR-Information,
DL-TimeslotISCPInfo,
DL-TimeslotISCPInfoLCR,
DL-TPC-Pattern01Count,
DPC-Mode,
DPCH-ID,
DSCH-ID,
DSCH-FDD-Common-Information,
DSCH-FDD-Information,
DSCH-InformationResponse,
DSCH-TDD-Information,
DwPCH-Power,
End-Of-Audit-Sequence-Indicator,
EnhancedDSCHPC,
EnhancedDSCHPCCounter,
EnhancedDSCHPCIndicator,
EnhancedDSCHPCWnd,

EnhancedDSCHPowerOffset,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FPACH-Power,
FrameAdjustmentValue,
FrameHandlingPriority,
FrameOffset,
HS-PDSCH-FDD-Code-Information,
HS-SCCH-ID,
HS-SCCH-FDD-Code-Information,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,
IB-Type,
IndicationType,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
InnerLoopDLPCStatus,
IPDL-FDD-Parameters,
IPDL-TDD-Parameters,
IPDL-Indicator,
LimitedPowerIncrease,
Local-Cell-ID,
MaximumDL-PowerCapability,
MaximumPDSCH-Power,
MaximumTransmissionPower,
Max-Number-of-PCPCHes,
MaxNrOfUL-DPDCHs,
MaxPRACH-MidambleShifts,
MeasurementFilterCoefficient,
MeasurementID,
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftLCR,
MinimumDL-PowerCapability,
MinSpreadingFactor,
MinUL-ChannelisationCodeLength,
MultiplexingPosition,
NEOT,
NCyclesPerSFNperiod,
NFmax,
NRepetitionsPerCyclePeriod,
N-INSYNC-IND,
N-OUTSYNC-IND,
NeighbouringCellMeasurementInformation,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation,

NodeB-CommunicationContextID,
NStartMessage,
PagingIndicatorLength,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PCP-Length,
PDSCH-CodeMapping,
PDSCHSet-ID,
PDSCH-ID,
PICH-Mode,
PICH-Power,
PowerAdjustmentType,
PowerOffset,
PowerRaiseLimit,
PRACH-Midamble,
PreambleSignatures,
PreambleThreshold,
PredictedSFNSFNDeviationLimit,
PredictedTUTRANGPSDeviationLimit,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
SCH-TimeSlot,
PunctureLimit,
PUSCHSet-ID,
PUSCH-ID,
QE-Selector,
RACH-SlotFormat,
RACH-SubChannelNumbers,
ReferenceClockAvailability,
ReferenceSFNoffset,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
RequestedDataValue,
RequestedDataValueInformation,
ResourceOperationalState,
RL-Set-ID,
RL-ID,
RL-Specific-DCH-Info,
Received-total-wide-band-power-Value,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
RNC-ID,
ScramblingCodeNumber,
SecondaryCCPCH-SlotFormat,
Segment-Type,
S-FieldLength,
SFN,
SFNSFNChangeLimit,
SFNSFNdriftRate,
SFNSFNdriftRateQuality,

SFNQuality,
ShutdownTimer,
SIB-Originator,
SpecialBurstScheduling,
SignallingBearerRequestIndicator,
SSDT-Cell-Identity,
SSDT-CellID-Length,
SSDT-Indication,
Start-Of-Audit-Sequence-Indicator,
STTD-Indicator,
SSDT-SupportIndicator,
SyncCase,
SYNCD1CodeId,
SyncFrameNumber,
SynchronisationReportCharacteristics,
SynchronisationReportType,
T-Cell,
T-RLFFAILURE,
TDD-ChannelisationCode,
TDD-ChannelisationCodeLCR,
TDD-DL-Code-LCR-Information,
TDD-DPCHOffset,
TDD-TPC-DownlinkStepSize,
TDD-PhysicalChannelOffset,
TDD-UL-Code-LCR-Information,
TFCI2-BearerInformationResponse,
TFCI2BearerRequestIndicator,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TFCS,
TimeSlot,
TimeSlotLCR,
TimeSlotDirection,
TimeSlotStatus,
TimingAdjustmentValue,
TimingAdvanceApplied,
ToAWE,
ToAWS,
TransmissionDiversityApplied,
TransmitDiversityIndicator,
TransmissionGapPatternSequenceCodeInformation,
Transmission-Gap-Pattern-Sequence-Information,
TransportBearerRequestIndicator,
TransportFormatSet,
TransportLayerAddress,
TSTD-Indicator,
TUTRANGPS,
TUTRANGPSChangeLimit,
TUTRANGPSDriftRate,
TUTRANGPSDriftRateQuality,
TUTRANGPSQuality,
UARFCN,

```
UC-Id,
USCH-Information,
USCH-InformationResponse,
UL-CapacityCredit,
UL-DPCCH-SlotFormat,
UL-SIR,
UL-FP-Mode,
UL-PhysCH-SF-Variation,
UL-ScramblingCode,
UL-Timeslot-Information,
UL-TimeslotLCR-Information,
UL-TimeSlot-ISCP-Info,
UL-TimeSlot-ISCP-LCR-Info,
UL-TimeslotISCP-Value,
UL-TimeslotISCP-Value-IncrDecrThres,
USCH-ID,
HSDSCH-FDD-Information,
HSDSCH-FDD-Information-Response,
HSDSCH-Information-to-Modify,
HSDSCH-MACdFlow-ID,
HSDSCH-RNTI,
HSDSCH-TDD-Information,
HSDSCH-TDD-Information-Response,
PrimaryCCPCH-RSCP
FROM NBAP-IEs

PrivateIE-Container{},
ProtocolExtensionContainer{},
ProtocolIE-Container{},
ProtocolIE-Single-Container{},
ProtocolIE-ContainerList{},
NBAP-PRIVATE-IES,
NBAP-PROTOCOL-IES,
NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers

id-Active-Pattern-Sequence-Information,
id-AdjustmentRatio,
id-AICH-Information,
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-AP-AICH-Information,
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-BCH-Information,
id-BCCH-ModificationTime,
id-bindingID,
id-BlockingPriorityIndicator,
id-Cause,
id-CauseLevel-PSCH-ReconfFailureTDD,
id-CauseLevel-RL-AdditionFailureFDD,
id-CauseLevel-RL-AdditionFailureTDD,
id-CauseLevel-RL-ReconfFailure,
id-CauseLevel-RL-SetupFailureFDD,
id-CauseLevel-RL-SetupFailureTDD,
```

id-CauseLevel-SyncAdjustmntFailureTDD,
id-CCP-InformationItem-AuditRsp,
id-CCP-InformationList-AuditRsp,
id-CCP-InformationItem-ResourceStatusInd,
id-CCTrCH-InformationItem-RL-FailureInd,
id-CCTrCH-InformationItem-RL-RestoreInd,
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD,
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD,
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD,
id-CDCA-ICH-Information,
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD,
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD,
id-Cell-InformationItem-AuditRsp,
id-Cell-InformationItem-ResourceStatusInd,
id-Cell-InformationList-AuditRsp,
id-CellParameterID,
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD,
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD,
id-cellSyncBurstRepetitionPeriod,
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD,
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD,
id-CellSyncInfo-CellSyncReprtTDD,
id-CFN,
id-CFNReportingIndicator,
id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD,
id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID,
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-CPCH-Information,
id-CPCH-Parameters-CTCH-SetupRsp,
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-CSBTransmissionID,
id-CSBMeasurementID,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,

id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,
id-DCH-RearrangeList-Bearer-RearrangeInd,
id-DSCH-RearrangeList-Bearer-RearrangeInd,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DelayedActivation,
id-DelayedActivationList-RL-ActivationCmdFDD,
id-DelayedActivationList-RL-ActivationCmdTDD,
id-DelayedActivationInformation-RL-ActivationCmdFDD,
id-DelayedActivationInformation-RL-ActivationCmdTDD,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-TimingAdjustment,
id-DL-PowerBalancing-Information,
id-DL-PowerBalancing-ActivationIndicator,
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,
id-DL-PowerBalancing-UpdatedIndicator,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-TPC-Pattern01Count,
id-DPC-Mode,
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,

id-DSCH-DeleteList-RL-ReconfPrepFDD,
id-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-FDD-Common-Information,
id-DSCH-TDD-Information,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-End-Of-Audit-Sequence-Indicator,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator,
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRqstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstTDD,
id-IndicationType-ResourceStatusInd,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rqst,
id-InformationExchangeObjectType-InfEx-Rsp,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationReportCharacteristics,
id-InformationType,
id-InitDL-Power,
id-InnerLoopDLPCStatus,
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
id-IPDLParameter-Information-Cell-ReconfRqstFDD,
id-IPDLParameter-Information-Cell-SetupRqstFDD,
id-IPDLParameter-Information-Cell-ReconfRqstTDD,
id-IPDLParameter-Information-Cell-SetupRqstTDD,
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
id-Limited-power-increase-information-Cell-SetupRqstFDD,
id-Local-Cell-ID,
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp,
id-Local-Cell-InformationItem-ResourceStatusInd,
id-Local-Cell-InformationItem2-ResourceStatusInd,
id-Local-Cell-InformationList-AuditRsp,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MaximumTransmissionPower,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,
id-NCyclesPerSFNperiod,
id-NeighbouringCellMeasurementInformation,
id-NodeB-CommunicationContextID,

id-NRepetitionsPerCyclePeriod,
id-P-CCPCH-Information,
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRqstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRqstTDD,
id-PCH-Parameters-CTCH-SetupRsp,
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstTDD,
id-PCH-Information,
id-PCPCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRqstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PDSCH-Information-Cell-SetupRqstFDD,
id-PDSCH-Information-Cell-ReconfRqstFDD,
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PDSCHSets-AddList-PSCH-ReconfRqst,
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRqstTDD,
id-PICH-ParametersItem-CTCH-SetupRqstTDD,
id-PowerAdjustmentType,
id-Power-Local-Cell-Group-InformationItem-AuditRsp,
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList-AuditRsp,
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd,
id-Power-Local-Cell-Group-ID,
id-PRACH-Information,
id-PRACHConstant,
id-PRACH-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRqstFDD,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,
id-PrimarySCH-Information-Cell-SetupRqstFDD,
id-PrimaryScramblingCode,
id-SCH-Information-Cell-ReconfRqstTDD,
id-SCH-Information-Cell-SetupRqstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PUSCHConstant,
id-PUSCHSets-AddList-PSCH-ReconfRqst,
id-PUSCHSets-DeleteList-PSCH-ReconfRqst,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,

id-RACH-ParametersItem-CTCH-SetupRqstFDD,
id-RACH-ParameterItem-CTCH-SetupRqstTDD,
id-ReferenceClockAvailability,
id-ReferenceSFNoffset,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRqstFDD,
id-RL-informationItem-RL-DeletionRqst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
id-RL-InformationItem-RL-RestoreInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-informationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRqstFDD,
id-RL-InformationList-RL-SetupRqstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-ReconfRqstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-RL-Specific-DCH-Info,
id-S-CCPCH-Information,
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,

id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-SecondarySCH-Information-Cell-ReconfRqstFDD,
id-SecondarySCH-Information-Cell-SetupRqstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-SignallingBearerRequestIndicator,
id-SSDT-CellIDforEDSCHPC,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH,
id-SyncFrameNumber,
id-SynchronisationReportType,
id-SynchronisationReportCharacteristics,
id-SyncReportType-CellSyncReprtTDD,
id-T-Cell,
id-TargetCommunicationControlPortID,
id-TFCI2-Bearer-Information-RL-SetupRqstFDD,
id-TFCI2-BearerInformationResponse,
id-TFCI2BearerRequestIndicator,
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-timeslotInfo-CellSyncInitiationRqstTDD,
id-TimeslotISCPInfo,
id-TimingAdvanceApplied,
id-TransmissionDiversityApplied,
id-transportlayeraddress,
id-UARFCNforNt,
id-UARFCNforNd,
id-UARFCNforNu,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-UL-DPCH-InformationList-RL-SetupRqstTDD,
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,

id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD,
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,
id-USCH-Information-Add,
id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
id-USCH-InformationResponse,
id-USCH-Information,
id-USCH-RearrangeList-Bearer-RearrangeInd,
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD,
id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD,
id-DwPCH-LCR-Information,
id-DwPCH-LCR-Information-AuditRsp,
id-DwPCH-LCR-InformationList-AuditRsp,
id-DwPCH-LCR-Information-Cell-SetupRqstTDD,
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD,
id-DwPCH-LCR-Information-ResourceStatusInd,
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD,
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD,
id-FPACH-LCR-Information,
id-FPACH-LCR-Information-AuditRsp,
id-FPACH-LCR-InformationList-AuditRsp,
id-FPACH-LCR-InformationList-ResourceStatusInd,
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD,
id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD,
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD,
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-ReconfRqstTDD,
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD,
id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD,
id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD,
id-RL-InformationResponse-LCR-RL-SetupRspTDD,
id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD,
id-TimeSlot,
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD,
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD,
id-TimeSlotLCR-CM-Rqst,
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD,
id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,

id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD,
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD,
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD,
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-LCR-InformationModify-AddList,
id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD,
id-UL-SIRTarget,
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-Info-DM-Rqst,
id-PUSCH-Info-DM-Rsp,
id-PUSCH-Info-DM-Rprt,
id-RL-InformationResponse-LCR-RL-AdditionRspTDD,
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD,
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD,
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst,
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst,
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst,
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst,
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst,
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-neighbouringTDDCellMeasurementInformationLCR,
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD,
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD,
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD,
id-SYNCDlCodeIdMeasReconfInformationLCR-CellSyncReconfRqstTDD,
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRqstTDD,
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD,
id-SyncDLCodeIdThreInfoLCR,
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD,
id-DwPCH-Power,
id-Angle-Of-Arrival-Value-LCR,
id-HSDSCH-FDD-Information,
id-HSDSCH-FDD-Information-Response,
id-HSDSCH-FDD-Information-to-Add,
id-HSDSCH-FDD-Information-to-Delete,
id-HSDSCH-Information-to-Modify,
id-HSDSCH-RNTI,
id-HSDSCH-TDD-Information,

id-HSDSCH-TDD-Information-Response,
id-HSDSCH-TDD-Information-Response-LCR,
id-HSDSCH-TDD-Information-to-Add,
id-HSDSCH-TDD-Information-to-Delete,
id-HSPDSCH-RL-ID,
id-PrimCCPCH-RSCP-DL-PC-RqstTDD,

maxNrOfCCTrCHs,
maxNrOfCellSyncBursts,
maxNrOfCodes,
maxNrOfCPCHs,
maxNrOfDCHs,
maxNrOfDLTSs,
maxNrOfDLTSLCRs,
maxNrOfDPCHs,
maxNrOfDSCHs,
maxNrOfFACHs,
maxNrOfRLs,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfRLSets,
maxNrOfPCPCHs,
maxNrOfPDSCHs,
maxNrOfPUSCHs,
maxNrOfPRACHLCRs,
maxNrOfPDSCHSets,
maxNrOfPUSCHSets,
maxNrOfReceptsPerSyncFrame,
maxNrOfSCCPCHs,
maxNrOfSCCPCHLCRs,
maxNrOfULTSs,
maxNrOfULTSLCRs,
maxNrOfUSCHs,
maxAPSigNum,
maxCPCHCell,
maxFACHCell,
maxFPACHCell,
maxNoofLen,
maxRACHCell,
maxPCPCHCell,
maxPRACHCell,
maxSCCPCHCell,
maxSCPICHCell,
maxCellinNodeB,
maxCCPinNodeB,
maxCommunicationContext,
maxLocalCellinNodeB,
maxNrOfSlotFormatsPRACH,
maxNrOfCellSyncBursts,
maxNrOfReceptsPerSyncFrame,
maxIB,
maxIBSEG,
maxNrOfHSSCCHs,

```

maxNoOfSyncFramesLCR,
maxNrofReceptionsperSyncFrameLCR,
maxNrOfMACdFlows
FROM NBAP-Constants;

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP REQUEST FDD
--
-- *****

CommonTransportChannelSetupRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelSetupRequestFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelSetupRequestFDD-Extensions}} OPTIONAL,
    ...
}

CommonTransportChannelSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonTransportChannelSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID                               CRITICALITY   reject         TYPE           C-ID
      PRESENCE mandatory }|
    { ID      id-ConfigurationGenerationID         CRITICALITY   reject         TYPE           ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID      id-CommonPhysicalChannelType-CTCH-SetupRqstFDD CRITICALITY   ignore        TYPE           CommonPhysicalChannelType-CTCH-
      SetupRqstFDD PRESENCE mandatory },
    ...
}

CommonPhysicalChannelType-CTCH-SetupRqstFDD ::= CHOICE {
    secondary-CCPCH-parameters   Secondary-CCPCH-CTCH-SetupRqstFDD,
    pRACH-parameters             PRACH-CTCH-SetupRqstFDD,
    pCPCHes-parameters           PCPCH-CTCH-SetupRqstFDD,
    ...
}

Secondary-CCPCH-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID       CommonPhysicalChannelID,
    fdd-S-CCPCH-Offset            FDD-S-CCPCH-Offset,
    dl-ScramblingCode             DL-ScramblingCode OPTIONAL,
    -- This IE shall be present if the PCH Parameters IE is not present
    fdd-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    tFCS                          TFCS,
    secondary-CCPCH-SlotFormat     SecondaryCCPCH-SlotFormat,
    tFCI-Presence                 TFCI-Presence OPTIONAL,
    -- This IE shall be present if the Secondary CCPCH Slot Format is set to any of the values from 8 to 17
    multiplexingPosition          MultiplexingPosition,
    powerOffsetInformation         PowerOffsetInformation-CTCH-SetupRqstFDD,
    sTTD-Indicator                STTD-Indicator,
    fACH-Parameters               FACH-ParametersList-CTCH-SetupRqstFDD OPTIONAL,
    pCH-Parameters               PCH-Parameters-CTCH-SetupRqstFDD OPTIONAL,
}

```

```

    iE-Extensions          ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PowerOffsetInformation-CTCH-SetupRqstFDD ::= SEQUENCE {
    p01-ForTFCl-Bits      PowerOffset,
    p03-ForPilotBits      PowerOffset,
    iE-Extensions          ProtocolExtensionContainer { { PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-ParametersList-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstFDD }}

FACH-ParametersListIEs-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-SetupRqstFDD    CRITICALITY reject    TYPE FACH-ParametersListIE-CTCH-SetupRqstFDD PRESENCE mandatory }
}

FACH-ParametersListIE-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstFDD

FACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    transportFormatSet            TransportFormatSet,
    toAWS                          ToAWS,
    toAWE                          ToAWE,
    maxFACH-Power                 DL-Power,
    iE-Extensions                  ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

FACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID              CRITICALITY ignore    EXTENSION BindingID    PRESENCE optional }|
    { ID id-transportlayeraddress  CRITICALITY ignore    EXTENSION TransportLayerAddress    PRESENCE optional },
    ...
}

PCH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRqstFDD }}

PCH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersItem-CTCH-SetupRqstFDD    CRITICALITY reject    TYPE PCH-ParametersItem-CTCH-SetupRqstFDD PRESENCE mandatory }
}

PCH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    transportFormatSet            TransportFormatSet,
    toAWS                          ToAWS,

```

```

toAWE                               ToAWE,
pCH-Power                           DL-Power,
pICH-Parameters                      PICH-Parameters-CTCH-SetupRqstFDD,
iE-Extensions                       ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

PICH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-bindingID CRITICALITY ignore EXTENSION BindingID PRESENCE optional }|
  { ID id-transportlayeraddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
  ...
}

PICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  fdd-dl-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
  pICH-Power PICH-Power,
  pICH-Mode PICH-Mode,
  sTTD-Indicator STTD-Indicator,
  iE-Extensions ProtocolExtensionContainer { { PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PRACH-CTCH-SetupRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  scramblingCodeNumber ScramblingCodeNumber,
  tFCS TFCS,
  preambleSignatures PreambleSignatures,
  allowedSlotFormatInformation AllowedSlotFormatInformationList-CTCH-SetupRqstFDD,
  rACH-SubChannelNumbers RACH-SubChannelNumbers,
  ul-punctureLimit PunctureLimit,
  preambleThreshold PreambleThreshold,
  rACH-Parameters RACH-Parameters-CTCH-SetupRqstFDD,
  aICH-Parameters AICH-Parameters-CTCH-SetupRqstFDD,
  iE-Extensions ProtocolExtensionContainer { { PRACHItem-CTCH-SetupRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

PRACHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

AllowedSlotFormatInformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD

AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
  rACHSlotFormat RACH-SlotFormat,
  iE-Extensions ProtocolExtensionContainer { { AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD-ExtIEs} } OPTIONAL,
}

```

```

}
...
}
AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
RACH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ RACH-ParametersIE-CTCH-SetupRqstFDD }}
RACH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-ParametersItem-CTCH-SetupRqstFDD   CRITICALITY reject   TYPE RACH-ParametersItem-CTCH-SetupRqstFDD   PRESENCE mandatory }
}
RACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
  commonTransportChannelID          CommonTransportChannelID,
  transportFormatSet                 TransportFormatSet,
  iE-Extensions                      ProtocolExtensionContainer { { RACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs } }   OPTIONAL,
  ...
}
RACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-bindingID                  CRITICALITY ignore     EXTENSION BindingID          PRESENCE optional }|
  { ID id-transportlayeraddress      CRITICALITY ignore     EXTENSION TransportLayerAddress  PRESENCE optional },
  ...
}
AICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID           CommonPhysicalChannelID,
  aICH-TransmissionTiming           AICH-TransmissionTiming,
  fdd-dl-ChannelisationCodeNumber   FDD-DL-ChannelisationCodeNumber,
  aICH-Power                         AICH-Power,
  sTTD-Indicator                    STTD-Indicator,
  iE-Extensions                      ProtocolExtensionContainer { { AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs } }   OPTIONAL,
  ...
}
AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
PCPCH-CTCH-SetupRqstFDD ::= SEQUENCE {
  cPCH-Parameters                   CPCH-Parameters-CTCH-SetupRqstFDD,
  iE-Extensions                      ProtocolExtensionContainer { { PCPCHItem-CTCH-SetupRqstFDD-ExtIEs } }   OPTIONAL,
  ...
}
PCPCHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
CPCH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
  commonTransportChannelID          CommonTransportChannelID,
  transportFormatSet                 TransportFormatSet,

```



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aPPreambleScramblingCode      CPCHScramblingCodeNumber,
cDPreambleScramblingCode      CPCHScramblingCodeNumber,
tFCS                           TFCS,
cDSignatures                   PreambleSignatures          OPTIONAL,
cDSubChannelNumbers           CDSUBCHANNELNUMBERS          OPTIONAL,
punctureLimit                 PunctureLimit,
cPCH-UL-DPCCH-SlotFormat      CPCH-UL-DPCCH-SlotFormat,
uL-SIR                        UL-SIR,
initialDL-transmissionPower    DL-Power,
maximumDLPower                DL-Power,
minimumDLPower                DL-Power,
pO2-ForTPC-Bits               PowerOffset,
fDD-TPC-DownlinkStepSize      FDD-TPC-DownlinkStepSize,
nStartMessage                 NStartMessage,
nEOT                           NEOT,
channel-Assignment-Indication Channel-Assignment-Indication,
cPCH-Allowed-Total-Rate       CPCH-Allowed-Total-Rate,
pPCPCHChannelInformationList  PCPCHChannelInformationList-CTCH-SetupRqstFDD,
vCAMMapping-Information        VCAMMapping-InformationList-CTCH-SetupRqstFDD          OPTIONAL,
-- this IE shall be present if the Channel Assignment Indication is set to "CA Active" --
aP-AICH-Parameters            AP-AICH-Parameters-CTCH-SetupRqstFDD,
cDCA-ICH-Parameters           CDCA-ICH-Parameters-CTCH-SetupRqstFDD,
iE-Extensions                 ProtocolExtensionContainer { { CPCH-Parameters-CTCH-SetupRqstFDD-ExtIEs } }          OPTIONAL,
...
}

CPCH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID      id-bindingID          CRITICALITY ignore      EXTENSION      BindingID          PRESENCE      optional }|
  { ID      id-transportlayeraddress CRITICALITY ignore      EXTENSION      TransportLayerAddress PRESENCE      optional },
  ...
}

PCPCHChannelInformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfPCPCHs)) OF PCPCHChannelInformationItem-CTCH-SetupRqstFDD

PCPCHChannelInformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,
  cPCHScramblingCodeNumber     CPCHScramblingCodeNumber,
  dL-ScramblingCode            DL-ScramblingCode,
  fdd-dl-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
  pCP-Length                    PCP-Length,
  uCSM-Information              UCSM-Information-CTCH-SetupRqstFDD          OPTIONAL,
  -- this IE shall be present if the Channel Assignment Indication is equal to "CA Inactive" --
  iE-Extensions                 ProtocolExtensionContainer { { PCPCHChannelInformationItem-CTCH-SetupRqstFDD-ExtIEs } }          OPTIONAL,
  ...
}

PCPCHChannelInformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UCSM-Information-CTCH-SetupRqstFDD ::= SEQUENCE {
  minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength,
  nFmax                          NFmax,

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channelRequestParameters          ChannelRequestParametersList-CTCH-SetupRqstFDD          OPTIONAL,
iE-Extensions                     ProtocolExtensionContainer { { UCSM-InformationItem-CTCH-SetupRqstFDD-ExtIEs } }  OPTIONAL,
...
}

UCSM-InformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

ChannelRequestParametersList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxAPSigNum)) OF ChannelRequestParametersItem-CTCH-SetupRqstFDD

ChannelRequestParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
aPPreambleSignature              APPreambleSignature,
aPSubChannelNumber               ASubChannelNumber          OPTIONAL,
iE-Extensions                    ProtocolExtensionContainer { { ChannelRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs } }  OPTIONAL,
...
}

ChannelRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

VCAMMapping-InformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNoofLen)) OF VCAMMapping-InformationItem-CTCH-SetupRqstFDD

VCAMMapping-InformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
minUL-ChannelisationCodeLength   MinUL-ChannelisationCodeLength,
nFmax                             NFmax,
max-Number-of-PCPCHes           Max-Number-of-PCPCHes,
sFRequestParameters             SFRequestParametersList-CTCH-SetupRqstFDD,
iE-Extensions                   ProtocolExtensionContainer { { VCAMMapping-InformationItem-CTCH-SetupRqstFDD-ExtIEs } }  OPTIONAL,
...
}

VCAMMapping-InformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

SFRequestParametersList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxAPSigNum)) OF SFRequestParametersItem-CTCH-SetupRqstFDD

SFRequestParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
aPPreambleSignature              APPreambleSignature,
aPSubChannelNumber               ASubChannelNumber          OPTIONAL,
iE-Extensions                    ProtocolExtensionContainer { { SFRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs } }  OPTIONAL,
...
}

SFRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

AP-AICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
commonPhysicalChannelID         CommonPhysicalChannelID,
fdd-dl-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,

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aP-AICH-Power          AICH-Power,
cSICH-Power            AICH-Power,
sTTD-Indicator        STTD-Indicator,
iE-Extensions         ProtocolExtensionContainer { { AP-AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
...
}

AP-AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

CDCA-ICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
commonPhysicalChannelID      CommonPhysicalChannelID,
fdd-dl-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
cDCA-ICH-Power              AICH-Power,
sTTD-Indicator              STTD-Indicator,
iE-Extensions               ProtocolExtensionContainer { { CDCA-ICH-Parameters-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
...
}

CDCA-ICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP REQUEST TDD
--
-- *****

CommonTransportChannelSetupRequestTDD ::= SEQUENCE {
protocolIEs          ProtocolIE-Container {{CommonTransportChannelSetupRequestTDD-IEs}},
protocolExtensions  ProtocolExtensionContainer {{CommonTransportChannelSetupRequestTDD-Extensions}} OPTIONAL,
...
}

CommonTransportChannelSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
{ ID id-C-ID          CRITICALITY reject      TYPE          C-ID
PRESENCE mandatory }|
{ ID id-ConfigurationGenerationID CRITICALITY reject      TYPE          ConfigurationGenerationID
PRESENCE mandatory }|
{ ID id-CommonPhysicalChannelType-CTCH-SetupRqstTDD CRITICALITY ignore    TYPE          CommonPhysicalChannelType-CTCH-
SetupRqstTDD PRESENCE mandatory },
...
}

CommonTransportChannelSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

CommonPhysicalChannelType-CTCH-SetupRqstTDD ::= CHOICE {
secondary-CCPCH-parameters Secondary-CCPCH-CTCH-SetupRqstTDD,
pRACH-parameters          PRACH-CTCH-SetupRqstTDD,

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}
...
}
Secondary-CCPCH-CTCH-SetupRqstTDD ::= SEQUENCE {
    sCCPCH-CCTrCH-ID          CCTrCH-ID,
    tFCS                      TFCS,
    tFCI-Coding               TFCI-Coding,
    punctureLimit             PunctureLimit,
    secondaryCCPCH-parameterList Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD,
    fACH-ParametersList       FACH-ParametersList-CTCH-SetupRqstTDD OPTIONAL,
    pCH-Parameters            PCH-Parameters-CTCH-SetupRqstTDD OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer {{Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs}} OPTIONAL,
    ...
}

Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION Secondary-CCPCH-LCR-
parameterList-CTCH-SetupRqstTDD PRESENCE optional }, -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    ...
}

Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD }}

Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD PRESENCE
mandatory } -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
}

Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD

Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    tdd-ChannelisationCode   TDD-ChannelisationCode,
    timeslot                 TimeSlot,
    midambleShiftandBurstType MidambleShiftAndBurstType,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
    repetitionPeriod         RepetitionPeriod,
    repetitionLength         RepetitionLength,
    s-CCPCH-Power            DL-Power,
    iE-Extensions            ProtocolExtensionContainer { { Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstTDD }}

FACH-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE FACH-ParametersListIE-CTCH-SetupRqstTDD PRESENCE mandatory }
}

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FACH-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstTDD

FACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonTransportChannelID          CommonTransportChannelID,
    fACH-CCTrCH-ID                    CCTrCH-ID,
    dl-TransportFormatSet              TransportFormatSet,
    toAWS                              ToAWS,
    toAWE                              ToAWE,
    iE-Extensions                     ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-maxFACH-Power-LCR-CTCH-SetupRqstTDD          CRITICALITY reject      EXTENSION  DL-Power          PRESENCE  optional }|
    -- Applicable to Fes 1.28Mcps TDD only
    { ID id-bindingID                                  CRITICALITY ignore      EXTENSION  BindingID              PRESENCE  optional }|
    { ID id-transportlayeraddress                      CRITICALITY ignore      EXTENSION  TransportLayerAddress  PRESENCE  optional },
    ...
}

PCH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRqstTDD }}

PCH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersItem-CTCH-SetupRqstTDD        CRITICALITY reject      TYPE PCH-ParametersItem-CTCH-SetupRqstTDD  PRESENCE  mandatory }
}

PCH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonTransportChannelID          CommonTransportChannelID,
    pCH-CCTrCH-ID                    CCTrCH-ID,
    dl-TransportFormatSet              TransportFormatSet,
    toAWS                              ToAWS,
    toAWE                              ToAWE,
    pICH-Parameters                   PICH-Parameters-CTCH-SetupRqstTDD,
    iE-Extensions                     ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PCH-Power-LCR-CTCH-SetupRqstTDD            CRITICALITY reject      EXTENSION  DL-Power          PRESENCE  optional }|
    -- Applicable to Fes 1.28Mcps TDD only
    { ID id-PICH-LCR-Parameters-CTCH-SetupRqstTDD      CRITICALITY reject      EXTENSION  PICH-LCR-Parameters-CTCH-SetupRqstTDD PRESENCE  optional }|
    SetupRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
    { ID id-bindingID                                  CRITICALITY ignore      EXTENSION  BindingID              PRESENCE  optional }|
    { ID id-transportlayeraddress                      CRITICALITY ignore      EXTENSION  TransportLayerAddress  PRESENCE  optional },
    ...
}

PICH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-SetupRqstTDD }}

PICH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PICH-ParametersItem-CTCH-SetupRqstTDD      CRITICALITY reject      TYPE PICH-ParametersItem-CTCH-SetupRqstTDD  PRESENCE  optional }
} -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD

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PICH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    tdd-ChannelisationCode       TDD-ChannelisationCode,
    timeSlot                      TimeSlot,
    midambleShiftAndBurstType     MidambleShiftAndBurstType,
    tdd-PhysicalChannelOffset     TDD-PhysicalChannelOffset,
    repetitionPeriod              RepetitionPeriod,
    repetitionLength              RepetitionLength,
    pagingIndicatorLength         PagingIndicatorLength,
    pICH-Power                    PICH-Power,
    iE-Extensions                 ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PICH-LCR-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-LCR-ParametersIE-CTCH-SetupRqstTDD }}

PICH-LCR-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD CRITICALITY reject TYPE PICH-LCR-ParametersItem-CTCH-SetupRqstTDD PRESENCE mandatory }
} Mandatory for 1.28Mcps TDD

PICH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR     TDD-ChannelisationCodeLCR,
    timeSlotLCR                  TimeSlotLCR,
    midambleShiftLCR             MidambleShiftLCR,
    tdd-PhysicalChannelOffset     TDD-PhysicalChannelOffset,
    repetitionPeriod              RepetitionPeriod,
    repetitionLength              RepetitionLength,
    pagingIndicatorLength         PagingIndicatorLength,
    pICH-Power                    PICH-Power,
    iE-Extensions                 ProtocolExtensionContainer { { PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-LCR-parameterListIEs-CTCH-SetupRqstTDD }}

Secondary-CCPCH-LCR-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD PRESENCE optional } Mandatory for 1.28Mcps TDD only
}

Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHLCRs)) OF Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD

Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {

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commonPhysicalChannelID          CommonPhysicalChannelID,
tdd-ChannelisationCodeLCR        TDD-ChannelisationCodeLCR,
timeslotLCR                      TimeSlotLCR,
midambleShiftLCR                MidambleShiftLCR,
tdd-PhysicalChannelOffset        TDD-PhysicalChannelOffset,
repetitionPeriod                RepetitionPeriod,
repetitionLength                RepetitionLength,
s-CCPCH-Power                   DL-Power,
iE-Extensions                    ProtocolExtensionContainer { { Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs } }
OPTIONAL,
...
}

Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PRACH-CTCH-SetupRqstTDD ::= SEQUENCE {
  prach-Parameters-CTCH-SetupRqstTDD          PRACH-Parameters-CTCH-SetupRqstTDD,
  iE-Extensions                              ProtocolExtensionContainer { { PRACH-CTCH-SetupRqstTDD-ExtIEs } }
  ...
}

PRACH-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD          CRITICALITY reject          EXTENSION          PRACH-LCR-ParametersList-CTCH-
SetupRqstTDD          PRESENCE optional          } | -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
  { ID id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD          CRITICALITY reject          EXTENSION          FPACH-LCR-Parameters-CTCH-
SetupRqstTDD          PRESENCE optional          }, -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
  ...
}

PRACH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container { { PRACH-ParametersIE-CTCH-SetupRqstTDD } }

PRACH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-ParametersItem-CTCH-SetupRqstTDD          CRITICALITY reject          TYPE          PRACH-ParametersItem-CTCH-SetupRqstTDD          PRESENCE optional }
} -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD

PRACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID          CommonPhysicalChannelID,
  tfcs                             TFCS,
  timeslot                         TimeSlot,
  tdd-ChannelisationCode           TDD-ChannelisationCode,
  maxPRACH-MidambleShifts         MaxPRACH-MidambleShifts,
  prach-Midamble                   PRACH-Midamble,
  rach                             RACH-Parameter-CTCH-SetupRqstTDD,
  iE-Extensions                    ProtocolExtensionContainer { { PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } }
  ...
}

PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

RACH-Parameter-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ RACH-ParameterIE-CTCH-SetupRqstTDD }}

RACH-ParameterIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-ParameterItem-CTCH-SetupRqstTDD   CRITICALITY reject   TYPE RACH-ParameterItem-CTCH-SetupRqstTDD   PRESENCE mandatory }
}

RACH-ParameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonTransportChannelID      CommonTransportChannelID,
  uL-TransportFormatSet         TransportFormatSet,
  iE-Extensions                  ProtocolExtensionContainer { { RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs } }   OPTIONAL,
  ...
}

RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-bindingID              CRITICALITY ignore      EXTENSION BindingID              PRESENCE optional }|
  { ID id-transportlayeraddress  CRITICALITY ignore      EXTENSION TransportLayerAddress   PRESENCE optional },
  ...
}

PRACH-LCR-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-LCR-ParametersListIEs-CTCH-SetupRqstTDD }}

PRACH-LCR-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD   CRITICALITY reject   TYPE PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD   PRESENCE optional }
}

PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfPRACHLCRs)) OF PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD

PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,
  tFCS                          TFCS,
  timeslotLCR                   TimeSlotLCR,
  tdd-ChannelisationCodeLCR     TDD-ChannelisationCodeLCR,
  maxPRACH-MidambleShifts      MaxPRACH-MidambleShifts,
  pRACH-Midamble                 PRACH-Midamble,
  rACH                           RACH-Parameter-CTCH-SetupRqstTDD,
  iE-Extensions                  ProtocolExtensionContainer { { PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } }   OPTIONAL,
  ...
}

PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

FPACH-LCR-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FPACH-LCR-ParametersIE-CTCH-SetupRqstTDD }}

FPACH-LCR-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD   CRITICALITY reject   TYPE FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD   PRESENCE optional }
}

FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,

```



```

tdd-ChannelisationCodeLCR          TDD-ChannelisationCodeLCR,
timeslotLCR                        TimeSlotLCR,
midambleShiftLCR                   MidambleShiftLCR,
fPACH-Power                         FPACH-Power,
iE-Extensions                       ProtocolExtensionContainer { { FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} } OPTIONAL,
...
}

```

```

FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP RESPONSE
--
-- *****

```

```

CommonTransportChannelSetupResponse ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{CommonTransportChannelSetupResponse-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelSetupResponse-Extensions}} OPTIONAL,
  ...
}

```

```

CommonTransportChannelSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-ParametersList-CTCH-SetupRsp CRITICALITY ignore TYPE FACH-CommonTransportChannel-InformationResponse PRESENCE
  optional }|
  { ID id-PCH-Parameters-CTCH-SetupRsp CRITICALITY ignore TYPE CommonTransportChannel-InformationResponse PRESENCE
  optional }|
  { ID id-RACH-Parameters-CTCH-SetupRsp CRITICALITY ignore TYPE CommonTransportChannel-InformationResponse PRESENCE
  optional }|
  { ID id-CPCH-Parameters-CTCH-SetupRsp CRITICALITY ignore TYPE CommonTransportChannel-InformationResponse
  PRESENCE optional }|
  { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE
  optional },
  ...
}

```

```

CommonTransportChannelSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

FACH-CommonTransportChannel-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF CommonTransportChannel-InformationResponse

```

```

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP FAILURE
--
-- *****

```

```

CommonTransportChannelSetupFailure ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{CommonTransportChannelSetupFailure-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelSetupFailure-Extensions}} OPTIONAL,
  ...
}

```

```

}
...
}
CommonTransportChannelSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Cause          CRITICALITY ignore      TYPE      Cause          PRESENCE mandatory  }|
  { ID      id-CriticalityDiagnostics CRITICALITY ignore      TYPE      CriticalityDiagnostics PRESENCE optional   },
  ...
}

CommonTransportChannelSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST FDD
--
-- *****

CommonTransportChannelReconfigurationRequestFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container   {{CommonTransportChannelReconfigurationRequestFDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestFDD-Extensions}} OPTIONAL,
  ...
}

CommonTransportChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-C-ID          CRITICALITY reject      TYPE      C-ID          PRESENCE mandatory  }|
  { ID      id-ConfigurationGenerationID          CRITICALITY reject      TYPE      ConfigurationGenerationID          PRESENCE mandatory  }|
  { ID      id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD CRITICALITY reject      TYPE      CommonPhysicalChannelType-CTCH-ReconfRqstFDD PRESENCE mandatory  },
  ...
}

CommonTransportChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CommonPhysicalChannelType-CTCH-ReconfRqstFDD ::= CHOICE {
  secondary-CCPCH-parameters          Secondary-CCPCHList-CTCH-ReconfRqstFDD,
  pRACH-parameters                    PRACHList-CTCH-ReconfRqstFDD,
  cPCH-parameters                      CPCHList-CTCH-ReconfRqstFDD,
  ...
}

Secondary-CCPCHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
  fACH-ParametersList-CTCH-ReconfRqstFDD          FACH-ParametersList-CTCH-ReconfRqstFDD OPTIONAL,
  pCH-Parameters-CTCH-ReconfRqstFDD              PCH-Parameters-CTCH-ReconfRqstFDD      OPTIONAL,
  pICH-Parameters-CTCH-ReconfRqstFDD            PICH-Parameters-CTCH-ReconfRqstFDD     OPTIONAL,
  iE-Extensions                                  ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-ReconfRqstFDD }}

FACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-ReconfRqstFDD    CRITICALITY reject    TYPE FACH-ParametersListIE-CTCH-ReconfRqstFDD    PRESENCE mandatory }
}

FACH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxFACHCell)) OF FACH-ParametersItem-CTCH-ReconfRqstFDD

FACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID          CommonTransportChannelID,
    maxFACH-Power                     DL-Power                OPTIONAL,
    toAWS                             ToAWS                  OPTIONAL,
    toAWE                             ToAWE                  OPTIONAL,
    iE-Extensions                     ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

FACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCH-Parameters-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-ReconfRqstFDD }}

PCH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersItem-CTCH-ReconfRqstFDD    CRITICALITY reject    TYPE PCH-ParametersItem-CTCH-ReconfRqstFDD    PRESENCE mandatory }
}

PCH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID          CommonTransportChannelID,
    pCH-Power                        DL-Power                OPTIONAL,
    toAWS                             ToAWS                  OPTIONAL,
    toAWE                             ToAWE                  OPTIONAL,
    iE-Extensions                     ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

PCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PICH-Parameters-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-ReconfRqstFDD }}

PICH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PICH-ParametersItem-CTCH-ReconfRqstFDD    CRITICALITY reject    TYPE PICH-ParametersItem-CTCH-ReconfRqstFDD    PRESENCE mandatory }
}

PICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    pICH-Power                       PICH-Power              OPTIONAL,

```

```

    iE-Extensions          ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PRACHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
    prach-ParametersList-CTCH-ReconfRqstFDD OPTIONAL,
    aich-ParametersList-CTCH-ReconfRqstFDD OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { PRACH-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PRACH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PRACH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container { { PRACH-ParametersListIEs-CTCH-ReconfRqstFDD } }

PRACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject TYPE PRACH-ParametersListIE-CTCH-ReconfRqstFDD PRESENCE mandatory }
}

PRACH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF PRACH-ParametersItem-CTCH-ReconfRqstFDD

PRACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    preambleSignatures           PreambleSignatures          OPTIONAL,
    allowedSlotFormatInformation AllowedSlotFormatInformation OPTIONAL,
    rach-SubChannelNumbers       RACH-SubChannelNumbers     OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { PRACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PRACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AllowedSlotFormatInformationList-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD

AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    rach-SlotFormat              RACH-SlotFormat,
    iE-Extensions                ProtocolExtensionContainer { { AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

AICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ AICH-ParametersListIEs-CTCH-ReconfRqstFDD }}

AICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-ParametersListIE-CTCH-ReconfRqstFDD    CRITICALITY reject  TYPE AICH-ParametersListIE-CTCH-ReconfRqstFDD    PRESENCE mandatory }
}

AICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF AICH-ParametersItem-CTCH-ReconfRqstFDD

AICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,
  aICH-Power                    AICH-Power          OPTIONAL,
  iE-Extensions                 ProtocolExtensionContainer { { AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs } }  OPTIONAL,
  ...
}

AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CPCHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
  cPCH-ParametersList-CTCH-ReconfRqstFDD      CPCH-ParametersList-CTCH-ReconfRqstFDD          OPTIONAL,
  aP-AICH-ParametersList-CTCH-ReconfRqstFDD   AP-AICH-ParametersList-CTCH-ReconfRqstFDD      OPTIONAL,
  cDCA-ICH-ParametersList-CTCH-ReconfRqstFDD  CDCA-ICH-ParametersList-CTCH-ReconfRqstFDD    OPTIONAL,
  iE-Extensions                               ProtocolExtensionContainer { { CPCHListItem-CTCH-ReconfRqstFDD-ExtIEs } }  OPTIONAL,
  ...
}

CPCHListItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CPCH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ CPCH-ParametersListIEs-CTCH-ReconfRqstFDD }}

CPCH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD    CRITICALITY reject  TYPE CPCH-ParametersListIE-CTCH-ReconfRqstFDD    PRESENCE mandatory }
}

CPCH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF CPCH-ParametersItem-CTCH-ReconfRqstFDD

CPCH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
  commonTransportChannelID      CommonTransportChannelID,
  uL-SIR                         UL-SIR          OPTIONAL,
  initialDL-transmissionPower    DL-Power        OPTIONAL,
  maximumDLPower                DL-Power        OPTIONAL,
  minimumDLPower                DL-Power        OPTIONAL,
  iE-Extensions                 ProtocolExtensionContainer { { CPCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } }  OPTIONAL,
  ...
}

CPCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

AP-AICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ AP-AICH-ParametersListIEs-CTCH-ReconfRqstFDD }}

AP-AICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject TYPE AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD PRESENCE mandatory }
}

AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF AP-AICH-ParametersItem-CTCH-ReconfRqstFDD

AP-AICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID          CommonPhysicalChannelID,
  aP-AICH-Power                    AICH-Power          OPTIONAL,
  cSICH-Power                      AICH-Power          OPTIONAL,
  iE-Extensions                    ProtocolExtensionContainer { { AP-AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

AP-AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CDCA-ICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ CDCA-ICH-ParametersListIEs-CTCH-ReconfRqstFDD }}

CDCA-ICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject TYPE CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD PRESENCE mandatory }
}

CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF CDCA-ICH-ParametersItem-CTCH-ReconfRqstFDD

CDCA-ICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID          CommonPhysicalChannelID,
  cDCA-ICH-Power                  AICH-Power          OPTIONAL,
  iE-Extensions                  ProtocolExtensionContainer { { CDCA-ICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

CDCA-ICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****

CommonTransportChannelReconfigurationRequestTDD ::= SEQUENCE {
  protocolIEs                      ProtocolIE-Container   {{CommonTransportChannelReconfigurationRequestTDD-IEs}},
  protocolExtensions              ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestTDD-Extensions}} OPTIONAL,
  ...
}

```

```

CommonTransportChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-C-ID                                     CRITICALITY reject      TYPE      C-ID
    PRESENCE mandatory }|
  { ID id-ConfigurationGenerationID               CRITICALITY reject      TYPE      ConfigurationGenerationID          PRESENCE
    mandatory }|
  { ID id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD          CRITICALITY reject      TYPE      Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD
    PRESENCE optional }|
  { ID id-PICH-Parameters-CTCH-ReconfRqstTDD          CRITICALITY reject      TYPE      PICH-Parameters-CTCH-ReconfRqstTDD          PRESENCE optional }|
  { ID id-FACH-ParametersList-CTCH-ReconfRqstTDD          CRITICALITY reject      TYPE      FACH-ParametersList-CTCH-ReconfRqstTDD          PRESENCE optional }|
  { ID id-PCH-Parameters-CTCH-ReconfRqstTDD          CRITICALITY reject      TYPE      PCH-Parameters-CTCH-ReconfRqstTDD          PRESENCE optional },
  ...
}

CommonTransportChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD          CRITICALITY reject      EXTENSION      FPACH-LCR-Parameters-CTCH-ReconfRqstTDD          PRESENCE
    optional }, -- Mandatory For 3-841.28Mcps TDD-only, Not Applicable to 3.84Mcps TDD
  ...
}

Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID                CCTrCH-ID,
  secondaryCCPCHList       Secondary-CCPCHList-CTCH-ReconfRqstTDD          OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRqstTDD-ExtIEs } }          OPTIONAL,
  ...
}

Secondary-CCPCH-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Secondary-CCPCHList-CTCH-ReconfRqstTDD ::= ProtocolIE-Single-Container { { Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD } }

Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD          CRITICALITY reject      TYPE      Secondary-CCPCHListIE-CTCH-ReconfRqstTDD          PRESENCE mandatory }
}

Secondary-CCPCHListIE-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCHItem-CTCH-ReconfRqstTDD

Secondary-CCPCHItem-CTCH-ReconfRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID  CommonPhysicalChannelID,
  sCCPCH-Power             DL-Power          OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-ReconfRqstTDD-ExtIEs } }          OPTIONAL,
  ...
}

Secondary-CCPCHItem-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PICH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID  CommonPhysicalChannelID,
  pICH-Power               PICH-Power          OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { PICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs } }          OPTIONAL,
}

```

```

}
...
}
PICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
FACH-ParametersList-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-ReconfRqstTDD
FACH-ParametersItem-CTCH-ReconfRqstTDD ::= SEQUENCE {
commonTransportChannelID CommonTransportChannelID,
toAWS ToAWS OPTIONAL,
toAWE ToAWE OPTIONAL,
iE-Extensions ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRqstTDD-ExtIEs } } OPTIONAL,
...
}
FACH-ParametersItem-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD CRITICALITY reject EXTENSION DL-Power PRESENCE optional },
-- For Applicable to 3.841.28 Mcps TDD only
...
}
PCH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
commonTransportChannelID CommonTransportChannelID,
toAWS ToAWS OPTIONAL,
toAWE ToAWE OPTIONAL,
iE-Extensions ProtocolExtensionContainer { { PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs } } OPTIONAL,
...
}
PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-PCH-Power-LCR-CTCH-ReconfRqstTDD CRITICALITY reject EXTENSION DL-Power PRESENCE optional },
... -- For Applicable to 3.841.28 Mcps TDD only
}
FPACH-LCR-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
commonPhysicalChannelId CommonPhysicalChannelID,
fPACHPower FPACH-Power OPTIONAL,
iE-Extensions ProtocolExtensionContainer { { FPACH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs } } OPTIONAL,
...
}
FPACH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE
--
-- *****

```



```

CommonTransportChannelReconfigurationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CommonTransportChannelReconfigurationResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{CommonTransportChannelReconfigurationResponse-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CriticalityDiagnostics    CRITICALITY    ignore    TYPE    CriticalityDiagnostics    PRESENCE optional},
    ...
}

CommonTransportChannelReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE
--
-- *****

CommonTransportChannelReconfigurationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CommonTransportChannelReconfigurationFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{CommonTransportChannelReconfigurationFailure-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-Cause                    CRITICALITY ignore    TYPE    Cause                    PRESENCE mandatory }|
    { ID    id-CriticalityDiagnostics    CRITICALITY ignore    TYPE    CriticalityDiagnostics    PRESENCE optional },
    ...
}

CommonTransportChannelReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL DELETION REQUEST
--
-- *****

CommonTransportChannelDeletionRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CommonTransportChannelDeletionRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{CommonTransportChannelDeletionRequest-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-C-ID                    CRITICALITY reject    TYPE    C-ID                    PRESENCE mandatory}|
    { ID    id-CommonPhysicalChannelID    CRITICALITY reject    TYPE    CommonPhysicalChannelID    PRESENCE mandatory}|
    { ID    id-ConfigurationGenerationID    CRITICALITY reject    TYPE    ConfigurationGenerationID    PRESENCE mandatory},
}

```

```

}
...
CommonTransportChannelDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL DELETION RESPONSE
--
-- *****

CommonTransportChannelDeletionResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelDeletionResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelDeletionResponse-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CriticalityDiagnostics    CRITICALITY    ignore    TYPE    CriticalityDiagnostics    PRESENCE optional},
    ...
}

CommonTransportChannelDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- BLOCK RESOURCE REQUEST
--
-- *****

BlockResourceRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{BlockResourceRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{BlockResourceRequest-Extensions}}    OPTIONAL,
    ...
}

BlockResourceRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-C-ID                CRITICALITY reject    TYPE    C-ID                PRESENCE mandatory }|
    { ID    id-BlockingPriorityIndicator    CRITICALITY reject    TYPE    BlockingPriorityIndicator    PRESENCE mandatory }|
    { ID    id-ShutdownTimer            CRITICALITY reject    TYPE    ShutdownTimer            PRESENCE conditional },
    -- The IE shall be present if the Blocking Priority Indicator IE indicates "Normal Priority"
    ...
}

BlockResourceRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****

```

```

--
-- BLOCK RESOURCE RESPONSE
--
-- *****

BlockResourceResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{BlockResourceResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{BlockResourceResponse-Extensions}}    OPTIONAL,
    ...
}

BlockResourceResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics      CRITICALITY      ignore      TYPE      CriticalityDiagnostics      PRESENCE optional },
    ...
}

BlockResourceResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- BLOCK RESOURCE FAILURE
--
-- *****

BlockResourceFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{BlockResourceFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{BlockResourceFailure-Extensions}}    OPTIONAL,
    ...
}

BlockResourceFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-Cause                        CRITICALITY      ignore      TYPE      Cause                        PRESENCE mandatory } |
    { ID      id-CriticalityDiagnostics      CRITICALITY      ignore      TYPE      CriticalityDiagnostics      PRESENCE optional },
    ...
}

BlockResourceFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- UNBLOCK RESOURCE INDICATION
--
-- *****

UnblockResourceIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{UnblockResourceIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{UnblockResourceIndication-Extensions}}    OPTIONAL,
    ...
}

```

```

UnblockResourceIndication-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-C-ID          CRITICALITY  ignore      TYPE      C-ID          PRESENCE  mandatory},
  ...
}

UnblockResourceIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- AUDIT REQUIRED INDICATION
--
-- *****

AuditRequiredIndication ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{AuditRequiredIndication-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{AuditRequiredIndication-Extensions}}          OPTIONAL,
  ...
}

AuditRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
  ...
}

AuditRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- AUDIT REQUEST
--
-- *****

AuditRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{AuditRequest-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{AuditRequest-Extensions}}          OPTIONAL,
  ...
}

AuditRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Start-Of-Audit-Sequence-Indicator  CRITICALITY  reject  TYPE  Start-Of-Audit-Sequence-Indicator  PRESENCE  mandatory },
  ...
}

AuditRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--

```

```

-- AUDIT RESPONSE
--
-- *****

AuditResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{AuditResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{AuditResponse-Extensions}}    OPTIONAL,
    ...
}

AuditResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-End-Of-Audit-Sequence-Indicator      CRITICALITY   ignore   TYPE      End-Of-Audit-Sequence-Indicator      PRESENCE mandatory } |
    { ID      id-Cell-InformationList-AuditRsp        CRITICALITY   ignore   TYPE      Cell-InformationList-AuditRsp          PRESENCE
    optional } |
    { ID      id-CCP-InformationList-AuditRsp         CRITICALITY   ignore   TYPE      CCP-InformationList-AuditRsp          PRESENCE optional
    } |
    -- CCP (Communication Control Port) --
    { ID      id-Local-Cell-InformationList-AuditRsp   CRITICALITY   ignore   TYPE      Local-Cell-InformationList-AuditRsp    PRESENCE
    optional } |
    { ID      id-Local-Cell-Group-InformationList-AuditRsp CRITICALITY   ignore   TYPE      Local-Cell-Group-InformationList-AuditRsp PRESENCE
    optional } |
    { ID      id-CriticalityDiagnostics                CRITICALITY   ignore   TYPE      CriticalityDiagnostics                PRESENCE optional
    },
    ...
}

AuditResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID      id-Power-Local-Cell-Group-InformationList-AuditRsp CRITICALITY   ignore   EXTENSION      Power-Local-Cell-Group-
    InformationList-AuditRsp      PRESENCE   optional },
    ...
}

Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-AuditRsp}}

Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID      id-Cell-InformationItem-AuditRsp        CRITICALITY   ignore   TYPE      Cell-InformationItem-AuditRsp          PRESENCE   optional }
}

Cell-InformationItem-AuditRsp ::= SEQUENCE {
    c-ID                      C-ID,
    configurationGenerationID ConfigurationGenerationID,
    resourceOperationalState  ResourceOperationalState,
    availabilityStatus        AvailabilityStatus,
    local-Cell-ID             Local-Cell-ID,
    primary-SCH-Information    P-SCH-Information-AuditRsp          OPTIONAL,
    secondary-SCH-Information  S-SCH-Information-AuditRsp         OPTIONAL,
    primary-CPICH-Information  P-CPICH-Information-AuditRsp       OPTIONAL,
    secondary-CPICH-InformationList S-CPICH-InformationList-AuditRsp   OPTIONAL,
    primary-CCPCH-Information  P-CCPCH-Information-AuditRsp       OPTIONAL,
    bCH-Information           BCH-Information-AuditRsp           OPTIONAL,
    secondary-CCPCH-InformationList S-CCPCH-InformationList-AuditRsp   OPTIONAL,
    pCH-Information           PCH-Information-AuditRsp           OPTIONAL,
    pICH-Information           PICH-Information-AuditRsp           OPTIONAL,
}

```

```

fACH-InformationList          FACH-InformationList-AuditRsp          OPTIONAL,
pRACH-InformationList        PRACH-InformationList-AuditRsp        OPTIONAL,
rACH-InformationList        RACH-InformationList-AuditRsp        OPTIONAL,
aICH-InformationList        AICH-InformationList-AuditRsp        OPTIONAL,
pCPCCH-InformationList      PCPCH-InformationList-AuditRsp      OPTIONAL,
cPCH-InformationList        CPCH-InformationList-AuditRsp        OPTIONAL,
aP-AICH-InformationList     AP-AICH-InformationList-AuditRsp     OPTIONAL,
cDCA-ICH-InformationList    CDCA-ICH-InformationList-AuditRsp    OPTIONAL,
sCH-Information             SCH-Information-AuditRsp            OPTIONAL,
iE-Extensions               ProtocolExtensionContainer { { Cell-InformationItem-AuditRsp-ExtIEs } }  OPTIONAL,
...
}

Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-FPACH-LCR-InformationList-AuditRsp          CRITICALITY ignore  EXTENSION  FPACH-LCR-InformationList-AuditRsp          PRESENCE optional } |
  -- ForApplicable to 1.28Mcps TDD only
  { ID id-DwPCH-LCR-InformationList-AuditRsp          CRITICALITY ignore  EXTENSION  DwPCH-LCR-InformationList-AuditRsp          PRESENCE optional }, |
  -- ForApplicable to 1.28Mcps TDD only
  ...
}

P-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-AuditRsp }}

P-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-SCH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-AuditRsp }}

S-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-SCH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CPICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-AuditRsp }}

P-CPICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CPICH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-CPICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-AuditRsp }}

S-CPICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-CPICH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CCPCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-AuditRsp }}

P-CCPCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CCPCH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

BCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ BCH-InformationIE-AuditRsp }}

```

```

BCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-BCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

S-CCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-AuditRsp }}

S-CCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

PCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PCH-InformationIE-AuditRsp }}

PCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

PICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PICH-InformationIE-AuditRsp }}

PICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

FACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-AuditRsp }}

FACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

PRACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-AuditRsp }}

PRACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

RACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-AuditRsp }}

RACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-AuditRsp }}

AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

PCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-AuditRsp }}

PCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE optional }
}

CPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-AuditRsp }}

```

```

CPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CPCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE optional }
}

AP-AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-AuditRsp }}

AP-AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-AP-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

CDCA-ICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-AuditRsp }}

CDCA-ICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CDCA-ICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ SCH-InformationIE-AuditRsp }}

SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-SCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

CCP-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-AuditRsp }}

CCP-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CCP-InformationItem-AuditRsp          CRITICALITY  ignore          TYPE  CCP-InformationItem-AuditRsp          PRESENCE mandatory }
}

CCP-InformationItem-AuditRsp ::= SEQUENCE {
  communicationControlPortID          CommunicationControlPortID,
  resourceOperationalState            ResourceOperationalState,
  availabilityStatus                  AvailabilityStatus,
  iE-Extensions                       ProtocolExtensionContainer  {{ CCP-InformationItem-AuditRsp-ExtIEs }}          OPTIONAL,
  ...
}

CCP-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

FPACH-LCR-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-AuditRsp }}

FPACH-LCR-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-FPACH-LCR-Information-AuditRsp  CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

DwPCH-LCR-InformationList-AuditRsp ::= ProtocolIE-Single-Container {{ DwPCH-LCR-InformationIE-AuditRsp }}

DwPCH-LCR-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-DwPCH-LCR-Information-AuditRsp  CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

```


Local-Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-AuditRsp }}

Local-Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
 { ID id-Local-Cell-InformationItem-AuditRsp CRITICALITY ignore TYPE Local-Cell-InformationItem-AuditRsp PRESENCE mandatory}
 }

Local-Cell-InformationItem-AuditRsp ::= SEQUENCE {
 local-Cell-ID Local-Cell-ID,
 dl-or-global-capacityCredit DL-or-Global-CapacityCredit,
 ul-capacityCredit UL-CapacityCredit OPTIONAL,
 commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw,
 dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw,
 maximumDL-PowerCapability MaximumDL-PowerCapability OPTIONAL,
 minSpreadingFactor MinSpreadingFactor OPTIONAL,
 minimumDL-PowerCapability MinimumDL-PowerCapability OPTIONAL,
 local-Cell-Group-ID Local-Cell-ID OPTIONAL,
 iE-Extensions ProtocolExtensionContainer {{ Local-Cell-InformationItem-AuditRsp-ExtIEs}} OPTIONAL,
 ...
 }

Local-Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 { ID id-ReferenceClockAvailability CRITICALITY ignore EXTENSION ReferenceClockAvailability PRESENCE optional }
 { ID id-Power-Local-Cell-Group-ID CRITICALITY ignore EXTENSION Local-Cell-ID PRESENCE optional },
 ...
 }

Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-InformationItemIE-AuditRsp }}

Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
 { ID id-Local-Cell-Group-InformationItem-AuditRsp CRITICALITY ignore TYPE Local-Cell-Group-InformationItem-AuditRsp PRESENCE mandatory}
 }

Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
 local-Cell-Group-ID Local-Cell-ID,
 dl-or-global-capacityCredit DL-or-Global-CapacityCredit,
 ul-capacityCredit UL-CapacityCredit OPTIONAL,
 commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw,
 dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw,
 iE-Extensions ProtocolExtensionContainer {{ Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}} OPTIONAL,
 ...
 }

Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 ...
 }

Power-Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-Cell-Group-InformationItemIE-AuditRsp }}

```

Power-Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID      id-Power-Local-Cell-Group-InformationItem-AuditRsp
    AuditRsp      PRESENCE      mandatory}
  CRITICALITY    ignore      TYPE    Power-Local-Cell-Group-InformationItem-
}

Power-Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
  power-Local-Cell-Group-ID      Local-Cell-ID,
  maximumDL-PowerCapability      MaximumDL-PowerCapability,
  iE-Extensions                  ProtocolExtensionContainer {{ Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}
  ...
}

Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- AUDIT FAILURE
--
-- *****

AuditFailure ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container    {{AuditFailure-IEs}},
  protocolExtensions      ProtocolExtensionContainer {{AuditFailure-Extensions}}
  ...
}

AuditFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Cause
    CRITICALITY    ignore      TYPE    Cause
    PRESENCE      mandatory
  }|
  { ID      id-CriticalityDiagnostics
    CRITICALITY    ignore      TYPE    CriticalityDiagnostics
    PRESENCE      optional },
  ...
}

AuditFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- COMMON MEASUREMENT INITIATION REQUEST
--
-- *****

CommonMeasurementInitiationRequest ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container    {{CommonMeasurementInitiationRequest-IEs}},
  protocolExtensions      ProtocolExtensionContainer {{CommonMeasurementInitiationRequest-Extensions}}
  ...
}

CommonMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {

```

```

{ ID id-MeasurementID CRITICALITY reject TYPE MeasurementID PRESENCE
mandatory }|
{ ID id-CommonMeasurementObjectType-CM-Rqst CRITICALITY reject TYPE CommonMeasurementObjectType-CM-Rqst PRESENCE
mandatory }|
This IE represents both the Common Measurement Object Type IE and the choice based on the Common Measurement Object Type
as described in the tabular message format in subclause 9.1.
{ ID id-CommonMeasurementType CRITICALITY reject TYPE CommonMeasurementType PRESENCE mandatory
}|
{ ID id-MeasurementFilterCoefficient CRITICALITY reject TYPE MeasurementFilterCoefficient PRESENCE
optional }|
{ ID id-ReportCharacteristics CRITICALITY reject TYPE ReportCharacteristics PRESENCE mandatory
}|
{ ID id-SFNReportingIndicator CRITICALITY reject TYPE FNReportingIndicator PRESENCE mandatory
}|
{ ID id-SFN CRITICALITY reject TYPE SFN PRESENCE optional
},
...
}

CommonMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
{ID id-CommonMeasurementAccuracy CRITICALITY reject EXTENSION CommonMeasurementAccuracy PRESENCE optional}
}

CommonMeasurementObjectType-CM-Rqst ::= CHOICE {
cell Cell-CM-Rqst,
rACH RACH-CM-Rqst,
cPCH CPCH-CM-Rqst,
...
}

Cell-CM-Rqst ::= SEQUENCE {
c-ID C-ID,
timeSlot TimeSlot OPTIONAL, -- ForApplicable to 3.84Mcps TDD only
iE-Extensions ProtocolExtensionContainer { { CellItem-CM-Rqst-ExtIEs } } OPTIONAL,
...
}

CellItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-TimeSlotLCR-CM-Rqst CRITICALITY reject EXTENSION TimeSlotLCR PRESENCE optional }|
-- ForApplicable to 1.28Mcps TDD only
{ID id-NeighbouringCellMeasurementInformation CRITICALITY ignore EXTENSION NeighbouringCellMeasurementInformation PRESENCE
optional},
...
}

RACH-CM-Rqst ::= SEQUENCE {
c-ID C-ID,
commonTransportChannelID CommonTransportChannelID,
iE-Extensions ProtocolExtensionContainer { { RACHItem-CM-Rqst-ExtIEs } } OPTIONAL,
...
}

```

```

RACHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCH-CM-Rqst ::= SEQUENCE {
    c-ID,
    commonTransportChannelID      CommonTransportChannelID,
    spreadingfactor                MinUL-ChannelisationCodeLength      OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { CPCHItem-CM-Rqst-ExtIEs } }          OPTIONAL,
    ...
}

CPCHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT INITIATION RESPONSE
--
-- *****

CommonMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container   {{CommonMeasurementInitiationResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonMeasurementInitiationResponse-Extensions}}          OPTIONAL,
    ...
}

CommonMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-MeasurementID          CRITICALITY ignore          TYPE      MeasurementID          PRESENCE
    mandatory }|
    { ID      id-CommonMeasurementObjectType-CM-Rsp  CRITICALITY ignore          TYPE      CommonMeasurementObjectType-CM-Rsp  PRESENCE optional
    }|
    { ID      id-SFN                      CRITICALITY ignore          TYPE      SFN                      PRESENCE
    optional }|
    { ID      id-CriticalityDiagnostics  CRITICALITY ignore          TYPE      CriticalityDiagnostics          PRESENCE optional },
    ...
}

CommonMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
    {ID id-CommonMeasurementAccuracy          CRITICALITY ignore          EXTENSION CommonMeasurementAccuracy          PRESENCE optional}
}

CommonMeasurementObjectType-CM-Rsp ::= CHOICE {
    cell                Cell-CM-Rsp,
    rACH                RACH-CM-Rsp,
    cPCH                CPCH-CM-Rsp,
    ...
}

Cell-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue,

```

```

    iE-Extensions          ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs } }          OPTIONAL,
    ...
}

CellItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RACH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue CommonMeasurementValue,
    iE-Extensions          ProtocolExtensionContainer { { RACHItem-CM-Rsp-ExtIEs } }          OPTIONAL,
    ...
}

RACHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue CommonMeasurementValue,
    iE-Extensions          ProtocolExtensionContainer { { CPCHItem-CM-Rsp-ExtIEs } }          OPTIONAL,
    ...
}

CPCHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT INITIATION FAILURE
--
-- *****

CommonMeasurementInitiationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CommonMeasurementInitiationFailure-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CommonMeasurementInitiationFailure-Extensions}}          OPTIONAL,
    ...
}

CommonMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-MeasurementID          CRITICALITY  ignore          TYPE      MeasurementID          PRESENCE mandatory }|
    { ID      id-Cause                  CRITICALITY  ignore          TYPE      Cause                    PRESENCE mandatory }|
    { ID      id-CriticalityDiagnostics CRITICALITY  ignore          TYPE      CriticalityDiagnostics    PRESENCE optional },
    ...
}

CommonMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--

```

```

-- COMMON MEASUREMENT REPORT
--
-- *****

CommonMeasurementReport ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{CommonMeasurementReport-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{CommonMeasurementReport-Extensions}}      OPTIONAL,
  ...
}

CommonMeasurementReport-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-MeasurementID          CRITICALITY ignore          TYPE      MeasurementID          PRESENCE
  mandatory  }}|
  { ID      id-CommonMeasurementObjectType-CM-Rprt  CRITICALITY ignore          TYPE      CommonMeasurementObjectType-CM-Rprt  PRESENCE mandatory
  }|
  { ID      id-SFN                    CRITICALITY ignore          TYPE      SFN                    PRESENCE
  optional  },
  ...
}

CommonMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CommonMeasurementObjectType-CM-Rprt ::= CHOICE {
  cell          Cell-CM-Rprt,
  rACH          RACH-CM-Rprt,
  cPCH          CPCH-CM-Rprt,
  ...
}

Cell-CM-Rprt ::= SEQUENCE {
  commonMeasurementValueInformation  CommonMeasurementValueInformation,
  iE-Extensions                      ProtocolExtensionContainer  {{ CellItem-CM-Rprt-ExtIEs }}      OPTIONAL,
  ...
}

CellItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RACH-CM-Rprt ::= SEQUENCE {
  commonMeasurementValueInformation  CommonMeasurementValueInformation,
  iE-Extensions                      ProtocolExtensionContainer  {{ RACHItem-CM-Rprt-ExtIEs }}      OPTIONAL,
  ...
}

RACHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

CPCH-CM-Rprt ::= SEQUENCE {
    commonMeasurementValueInformation    CommonMeasurementValueInformation,
    IE-Extensions                        ProtocolExtensionContainer {{ CPCHItem-CM-Rprt-ExtIEs }}
    ...
}

CPCHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT TERMINATION REQUEST
--
-- *****

CommonMeasurementTerminationRequest ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{CommonMeasurementTerminationRequest-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{CommonMeasurementTerminationRequest-Extensions}}
    ...
}

CommonMeasurementTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-MeasurementID      CRITICALITY ignore          TYPE    MeasurementID          PRESENCE mandatory},
    ...
}

CommonMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT FAILURE INDICATION
--
-- *****

CommonMeasurementFailureIndication ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{CommonMeasurementFailureIndication-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{CommonMeasurementFailureIndication-Extensions}}
    ...
}

CommonMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-MeasurementID      CRITICALITY ignore          TYPE    MeasurementID          PRESENCE mandatory }|
    { ID    id-Cause              CRITICALITY ignore          TYPE    Cause                PRESENCE mandatory },
    ...
}

CommonMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
-- *****
--
-- CELL SETUP REQUEST FDD
--
-- *****
```

```
CellSetupRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSetupRequestFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSetupRequestFDD-Extensions}}    OPTIONAL,
    ...
}
```

```
CellSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-Local-Cell-ID
      PRESENCE mandatory }|
    { ID      id-C-ID
      PRESENCE mandatory }|
    { ID      id-ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID      id-T-Cell
      PRESENCE mandatory }|
    { ID      id-UARFCNforNu
      PRESENCE mandatory }|
    { ID      id-UARFCNforNd
      PRESENCE mandatory }|
    { ID      id-MaximumTransmissionPower
      PRESENCE mandatory }|
    { ID      id-Closed-Loop-Timing-Adjustment-Mode
      Closedlooptimingadjustmentmode PRESENCE optional }|
    { ID      id-PrimaryScramblingCode
      PRESENCE mandatory }|
    { ID      id-Synchronisation-Configuration-Cell-SetupRqst
      Configuration-Cell-SetupRqst PRESENCE mandatory }|
    { ID      id-DL-TPC-Pattern01Count
      PRESENCE mandatory }|
    { ID      id-PrimarySCH-Information-Cell-SetupRqstFDD
      Cell-SetupRqstFDD PRESENCE mandatory }|
    { ID      id-SecondarySCH-Information-Cell-SetupRqstFDD
      Cell-SetupRqstFDD PRESENCE mandatory }|
    { ID      id-PrimaryCPICH-Information-Cell-SetupRqstFDD
      Cell-SetupRqstFDD PRESENCE mandatory }|
    { ID      id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD
      InformationList-Cell-SetupRqstFDD PRESENCE optional }|
    { ID      id-PrimaryCCPCH-Information-Cell-SetupRqstFDD
      Cell-SetupRqstFDD PRESENCE mandatory }|
    { ID      id-Limited-power-increase-information-Cell-SetupRqstFDD
      information-Cell-SetupRqstFDD PRESENCE mandatory },
    ...
}
```

```
CellSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-IPDLParameter-Information-Cell-SetupRqstFDD
      Cell-SetupRqstFDD PRESENCE optional }|
    CRITICALITY reject EXTENSION IPDLParameter-Information-
```



```

{ID id-PDSCH-Information-Cell-SetupRqstFDD
SetupRqstFDD PRESENCE optional }, CRITICALITY reject EXTENSION PDSCH-Information-Cell-
...
}

Synchronisation-Configuration-Cell-SetupRqst ::= SEQUENCE {
n-INSYNC-IND N-INSYNC-IND,
n-OUTSYNC-IND N-OUTSYNC-IND,
t-RLFFAILURE T-RLFFAILURE,
iE-Extensions ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-SetupRqst-ExtIEs} } OPTIONAL,
...
}

Synchronisation-Configuration-Cell-SetupRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PrimarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
commonPhysicalChannelID CommonPhysicalChannelID,
primarySCH-Power DL-Power,
tSTD-Indicator TSTD-Indicator,
iE-Extensions ProtocolExtensionContainer { { PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

SecondarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
commonPhysicalChannelID CommonPhysicalChannelID,
secondarySCH-Power DL-Power,
tSTD-Indicator TSTD-Indicator,
iE-Extensions ProtocolExtensionContainer { { SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PrimaryCPICH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
commonPhysicalChannelID CommonPhysicalChannelID,
primaryCPICH-Power PrimaryCPICH-Power,
transmitDiversityIndicator TransmitDiversityIndicator,
iE-Extensions ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```
SecondaryCPICH-InformationList-Cell-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container{{ SecondaryCPICH-
InformationItemIE-Cell-SetupRqstFDD }}
```

```
SecondaryCPICH-InformationItemIE-Cell-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID      id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD      CRITICALITY      reject      TYPE      SecondaryCPICH-
InformationItem-Cell-SetupRqstFDD      PRESENCE      mandatory}
}
```

```
SecondaryCPICH-InformationItem-Cell-SetupRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,
  dl-ScramblingCode            DL-ScramblingCode,
  fDD-DL-ChannelisationCodeNumber      FDD-DL-ChannelisationCodeNumber,
  secondaryCPICH-Power         DL-Power,
  transmitDiversityIndicator    TransmitDiversityIndicator,
  iE-Extensions                ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs} }      OPTIONAL,
  ...
}
```

```
SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
PrimaryCCPCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,
  bCH-information              BCH-Information-Cell-SetupRqstFDD,
  sTTD-Indicator               STTD-Indicator,
  iE-Extensions                ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs} }      OPTIONAL,
  ...
}
```

```
PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
BCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
  commonTransportChannelID      CommonTransportChannelID,
  bCH-Power                     DL-Power,
  iE-Extensions                ProtocolExtensionContainer { { BCH-Information-Cell-SetupRqstFDD-ExtIEs} }      OPTIONAL,
  ...
}
```

```
BCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
Limited-power-increase-information-Cell-SetupRqstFDD ::= SEQUENCE {
  powerRaiseLimit              PowerRaiseLimit,
  dlPowerAveragingWindowSize    DLPowerAveragingWindowSize,
  iE-Extensions                ProtocolExtensionContainer { { Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs} }
  OPTIONAL,
  ...
}
```

```

Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IPDLParameter-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    iPDL-FDD-Parameters          IPDL-FDD-Parameters,
    iPDL-Indicator                IPDL-Indicator,
    iE-Extensions                 ProtocolExtensionContainer { { IPDLParameter-Information-Cell-SetupRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

IPDLParameter-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    maximum-PDSCH-Power          Maximum-PDSCH-Power,
    iE-Extensions                 ProtocolExtensionContainer { { PDSCH-Information-Cell-SetupRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

PDSCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SETUP REQUEST TDD
--
-- *****

CellSetupRequestTDD ::= SEQUENCE {
    protocolIEs                   ProtocolIE-Container    {{CellSetupRequestTDD-IEs}},
    protocolExtensions            ProtocolExtensionContainer {{CellSetupRequestTDD-Extensions}}    OPTIONAL,
    ...
}

CellSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-Local-Cell-ID      CRITICALITY    reject    TYPE          Local-Cell-ID
      PRESENCE    mandatory    }|
    { ID    id-C-ID              CRITICALITY    reject    TYPE          C-ID
      PRESENCE    mandatory    }|
    { ID    id-ConfigurationGenerationID  CRITICALITY    reject    TYPE          ConfigurationGenerationID
      PRESENCE    mandatory    }|
    { ID    id-UARFCNforNt        CRITICALITY    reject    TYPE          UARFCN
      PRESENCE    mandatory    }|
    { ID    id-CellParameterID    CRITICALITY    reject    TYPE          CellParameterID
      PRESENCE    mandatory    }|
    { ID    id-MaximumTransmissionPower  CRITICALITY    reject    TYPE          MaximumTransmissionPower
      PRESENCE    mandatory    }|
    { ID    id-TransmissionDiversityApplied  CRITICALITY    reject    TYPE          TransmissionDiversityApplied
      PRESENCE    mandatory    }|
}
    
```

```

{ ID id-SyncCase CRITICALITY reject TYPE SyncCase
  PRESENCE mandatory }|
{ ID id-Synchronisation-Configuration-Cell-SetupRqst CRITICALITY reject TYPE Synchronisation-Configuration-
Cell-SetupRqst PRESENCE mandatory }|
{ ID id-DPCHConstant CRITICALITY reject TYPE ConstantValue
  PRESENCE mandatory }|
{ ID id-PUSCHConstant CRITICALITY reject TYPE ConstantValue
  PRESENCE mandatory }|
{ ID id-PRACHConstant CRITICALITY reject TYPE ConstantValue
  PRESENCE mandatory }|
{ ID id-TimingAdvanceApplied CRITICALITY reject TYPE TimingAdvanceApplied
  PRESENCE mandatory }|
{ ID id-SCH-Information-Cell-SetupRqstTDD CRITICALITY reject TYPE SCH-Information-Cell-SetupRqstTDD
  PRESENCE optional }| -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
{ ID id-PCCPCH-Information-Cell-SetupRqstTDD CRITICALITY reject TYPE PCCPCH-Information-Cell-
SetupRqstTDD PRESENCE optional }| -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
{ ID id-TimeSlotConfigurationList-Cell-SetupRqstTDD CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-
SetupRqstTDD PRESENCE optional }, -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
...
}

CellSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-
Cell-SetupRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
  { ID id-PCCPCH-LCR-Information-Cell-SetupRqstTDD CRITICALITY reject EXTENSION PCCPCH-LCR-Information-Cell-
SetupRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
  { ID id-DwPCH-LCR-Information-Cell-SetupRqstTDD CRITICALITY reject EXTENSION DwPCH-LCR-Information-Cell-
SetupRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
  { ID id-ReferenceSFNoffset CRITICALITY ignore EXTENSION ReferenceSFNoffset PRESENCE optional }|
  { ID id-IPDLParameter-Information-Cell-SetupRqstTDD CRITICALITY reject EXTENSION IPDLParameter-Information-
Cell-SetupRqstTDD PRESENCE optional }| -- Applicable to FSS 3.84Mcps TDD only
  { ID id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD CRITICALITY reject EXTENSION IPDLParameter-
Information-LCR-Cell-SetupRqstTDD PRESENCE optional }, -- Applicable to FSS 1.28Mcps TDD only
...
}

SCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  syncCaseIndicator SyncCaseIndicator-Cell-SetupRqstTDD-PSCH,
  sCH-Power DL-Power,
  tSTD-Indicator TSTD-Indicator,
  iE-Extensions ProtocolExtensionContainer { { SCH-Information-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

SCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SyncCaseIndicator-Cell-SetupRqstTDD-PSCH ::= ProtocolIE-Single-Container {{ SyncCaseIndicatorIE-Cell-SetupRqstTDD-PSCH }}

SyncCaseIndicatorIE-Cell-SetupRqstTDD-PSCH NBAP-PROTOCOL-IES ::= {

```

```

    { ID id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH CRITICALITY reject TYPE SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH PRESENCE
    mandatory }
  }

SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH ::= CHOICE {
  case1 Case1-Cell-SetupRqstTDD,
  case2 Case2-Cell-SetupRqstTDD,
  ...
}

Case1-Cell-SetupRqstTDD ::= SEQUENCE {
  timeSlot TimeSlot,
  iE-Extensions ProtocolExtensionContainer { { Case1Item-Cell-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

Case1Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Case2-Cell-SetupRqstTDD ::= SEQUENCE {
  sCH-TimeSlot SCH-TimeSlot,
  iE-Extensions ProtocolExtensionContainer { { Case2Item-Cell-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

Case2Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PCCPCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  pCCPCH-Power PCCPCH-Power,
  sCTD-Indicator SCTD-Indicator,
  iE-Extensions ProtocolExtensionContainer { { PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TimeSlotConfigurationList-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-SetupRqstTDD

TimeSlotConfigurationItem-Cell-SetupRqstTDD ::= SEQUENCE {
  timeSlot TimeSlot,
  timeSlotStatus TimeSlotStatus,
  timeSlotDirection TimeSlotDirection,
  iE-Extensions ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs} } OPTIONAL,
}

```

```

}
...
}
TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD
TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD ::= SEQUENCE {
timeSlotLCR                TimeSlotLCR,
timeSlotStatus             TimeSlotStatus,
timeSlotDirection         TimeSlotDirection,
iE-Extensions             ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs} }    OPTIONAL,
...
}
TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
PCCPCH-LCR-Information-Cell-SetupRqstTDD ::= SEQUENCE {
commonPhysicalChannelID    CommonPhysicalChannelID,
tdd-PhysicalChannelOffset  TDD-PhysicalChannelOffset,
repetitionPeriod           RepetitionPeriod,
repetitionLength           RepetitionLength,
pCCPCH-Power              PCCPCH-Power,
sCTD-Indicator             SCTD-Indicator,
tSTD-Indicator             TSTD-Indicator,
iE-Extensions             ProtocolExtensionContainer { { PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs} }    OPTIONAL,
...
}
PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
DwPCH-LCR-Information-Cell-SetupRqstTDD ::= SEQUENCE {
commonPhysicalChannelId    CommonPhysicalChannelID,
tSTD-Indicator             TSTD-Indicator,
sYNCDlCodeId              SYNCDlCodeId,
dWPCH-Power               DwPCH-Power,
iE-Extensions             ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs} }    OPTIONAL,
...
}
DwPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
IPDLParameter-Information-Cell-SetupRqstTDD ::= SEQUENCE {
iPDL-TDD-Parameters       IPDL-TDD-Parameters,
iPDL-Indicator            IPDL-Indicator,

```

```

    iE-Extensions          ProtocolExtensionContainer { { IPDLParameter-Information-Cell-SetupRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

IPDLParameter-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IPDLParameter-Information-LCR-Cell-SetupRqstTDD ::= SEQUENCE {
    iPDL-TDD-Parameters-LCR          IPDL-TDD-Parameters-LCR,
    iPDL-Indicator                    IPDL-Indicator,
    iE-Extensions          ProtocolExtensionContainer { { IPDLParameter-Information-LCR-Cell-SetupRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

IPDLParameter-Information-LCR-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SETUP RESPONSE
--
-- *****

CellSetupResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSetupResponse-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CellSetupResponse-Extensions}}    OPTIONAL,
    ...
}

CellSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics          CRITICALITY      ignore          TYPE      CriticalityDiagnostics          PRESENCE optional},
    ...
}

CellSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SETUP FAILURE
--
-- *****

CellSetupFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSetupFailure-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CellSetupFailure-Extensions}}    OPTIONAL,
    ...
}

CellSetupFailure-IEs NBAP-PROTOCOL-IES ::= {

```

```

    { ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory
    }|
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

CellSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL RECONFIGURATION REQUEST FDD
--
-- *****

CellReconfigurationRequestFDD ::= SEQUENCE {
    protocolIEs ProtocolIE-Container {{CellReconfigurationRequestFDD-IEs}},
    protocolExtensions ProtocolExtensionContainer {{CellReconfigurationRequestFDD-Extensions}} OPTIONAL,
    ...
}

CellReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID CRITICALITY reject TYPE C-ID
      PRESENCE mandatory }|
    { ID id-ConfigurationGenerationID CRITICALITY reject TYPE ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID id-MaximumTransmissionPower CRITICALITY reject TYPE MaximumTransmissionPower
      PRESENCE optional }|
    { ID id-Synchronisation-Configuration-Cell-ReconfRqst CRITICALITY reject TYPE Synchronisation-Configuration-
Cell-ReconfRqst PRESENCE optional }|
    { ID id-PrimarySCH-Information-Cell-ReconfRqstFDD CRITICALITY reject TYPE PrimarySCH-Information-Cell-
ReconfRqstFDD PRESENCE optional }|
    { ID id-SecondarySCH-Information-Cell-ReconfRqstFDD CRITICALITY reject TYPE SecondarySCH-Information-Cell-
ReconfRqstFDD PRESENCE optional }|
    { ID id-PrimaryCPICH-Information-Cell-ReconfRqstFDD CRITICALITY reject TYPE PrimaryCPICH-Information-Cell-
ReconfRqstFDD PRESENCE optional }|
    { ID id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD CRITICALITY reject TYPE SecondaryCPICH-InformationList-
Cell-ReconfRqstFDD PRESENCE optional }|
    { ID id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD CRITICALITY reject TYPE PrimaryCCPCH-Information-Cell-
ReconfRqstFDD PRESENCE optional },
    ...
}

CellReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-IPDLParameter-Information-Cell-ReconfRqstFDD CRITICALITY reject EXTENSION IPDLParameter-Information-
Cell-ReconfRqstFDD PRESENCE optional }|
    {ID id-PDSCH-Information-Cell-ReconfRqstFDD CRITICALITY reject EXTENSION PDSCH-Information-Cell-
ReconfRqstFDD PRESENCE optional },
    ...
}

Synchronisation-Configuration-Cell-ReconfRqst ::= SEQUENCE {

```



```

n-INSYNC-IND          N-INSYNC-IND,
n-OUTSYNC-IND         N-OUTSYNC-IND,
t-RLFFAILURE          T-RLFFAILURE,
iE-Extensions         ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs} }   OPTIONAL,
...
}

Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PrimarySCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
commonPhysicalChannelID      CommonPhysicalChannelID,
primarySCH-Power             DL-Power,
iE-Extensions                ProtocolExtensionContainer { { PrimarySCH-Information-Cell-ReconfRqstFDD-ExtIEs} }   OPTIONAL,
...
}

PrimarySCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

SecondarySCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
commonPhysicalChannelID      CommonPhysicalChannelID,
secondarySCH-Power           DL-Power,
iE-Extensions                ProtocolExtensionContainer { { SecondarySCH-Information-Cell-ReconfRqstFDD-ExtIEs} }   OPTIONAL,
...
}

SecondarySCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PrimaryCPICH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
commonPhysicalChannelID      CommonPhysicalChannelID,
primaryCPICH-Power           PrimaryCPICH-Power,
iE-Extensions                ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs} }   OPTIONAL,
...
}

PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

SecondaryCPICH-InformationList-Cell-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container{{ SecondaryCPICH-
InformationItemIE-Cell-ReconfRqstFDD }}

SecondaryCPICH-InformationItemIE-Cell-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
{ ID      id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD      CRITICALITY    reject          TYPE      SecondaryCPICH-
InformationItem-Cell-ReconfRqstFDD      PRESENCE      mandatory}
}

SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD ::= SEQUENCE {

```

```

    commonPhysicalChannelID          CommonPhysicalChannelID,
    secondaryCPICH-Power             DL-Power,
    iE-Extensions                    ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD-ExtIEs} }
    OPTIONAL,
    ...
}

SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PrimaryCCPCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
    bCH-information                  BCH-information-Cell-ReconfRqstFDD,
    iE-Extensions                    ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

BCH-information-Cell-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    bCH-Power                       DL-Power,
    iE-Extensions                    ProtocolExtensionContainer { { BCH-information-Cell-ReconfRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

BCH-information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IPDLParameter-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
    iPDL-FDD-Parameters              IPDL-FDD-Parameters    OPTIONAL,
    iPDL-Indicator                    IPDL-Indicator,
    iE-Extensions                    ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

IPDLParameter-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
    maximumPDSCH-Power              Maximum-PDSCH-Power,
    iE-Extensions                    ProtocolExtensionContainer { { PDSCH-Information-Cell-ReconfRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

PDSCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
-- *****
--
-- CELL RECONFIGURATION REQUEST TDD
--
-- *****
```

```
CellReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellReconfigurationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellReconfigurationRequestTDD-Extensions}}
    ...
}
```

```
CellReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY reject TYPE C-ID
      PRESENCE mandatory }|
    { ID id-ConfigurationGenerationID CRITICALITY reject TYPE ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID id-Synchronisation-Configuration-Cell-ReconfRqst CRITICALITY reject TYPE Synchronisation-Configuration-
      Cell-ReconfRqst PRESENCE optional }|
    { ID id-TimingAdvanceApplied CRITICALITY reject TYPE TimingAdvanceApplied
      PRESENCE optional }| -- Applicable to Fo 3.84Mcps TDD only
    { ID id-SCH-Information-Cell-ReconfRqstTDD CRITICALITY reject TYPE SCH-Information-Cell-
      ReconfRqstTDD PRESENCE optional }| -- Applicable to Fo 3.84Mcps TDD only
    { ID id-PCCPCH-Information-Cell-ReconfRqstTDD CRITICALITY reject TYPE PCCPCH-Information-Cell-
      ReconfRqstTDD PRESENCE optional }|
    { ID id-MaximumTransmissionPower CRITICALITY reject TYPE MaximumTransmissionPower
      PRESENCE optional }|
    { ID id-DPCHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE optional }|
    { ID id-PUSCHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE optional }|
    { ID id-PRACHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE optional }|
    { ID id-TimeSlotConfigurationList-Cell-ReconfRqstTDD CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-
      ReconfRqstTDD PRESENCE optional }, -- Applicable to Fo 3.84Mcps TDD only
    ...
}
```

```
CellReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-
      Cell-ReconfRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
    { ID id-DwPCH-LCR-Information-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION DwPCH-LCR-Information-Cell-
      ReconfRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
    { ID id-IPDLParameter-Information-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION IPDLParameter-Information-
      Cell-ReconfRqstTDD PRESENCE optional }| -- Applicable to Fo 3.84Mcps TDD only
    { ID id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION IPDLParameter-
      Information-LCR-Cell-ReconfRqstTDD PRESENCE optional }, -- Applicable to Fo 1.28Mcps TDD only
    ...
}
```

```
SCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    sCH-Power DL-Power,
```

```

    iE-Extensions          ProtocolExtensionContainer { { PSCH-Information-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PSCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCCPCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    pCCPCH-Power                 DL-Power,
    iE-Extensions                ProtocolExtensionContainer { { PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-ReconfRqstTDD

TimeSlotConfigurationItem-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlot                    TimeSlot,
    timeSlotStatus              TimeSlotStatus,
    timeSlotDirection           TimeSlotDirection,
    iE-Extensions              ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD

TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR                 TimeSlotLCR,
    timeSlotStatus              TimeSlotStatus,
    timeSlotDirection           TimeSlotDirection,
    iE-Extensions              ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DwPCH-LCR-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    dwPCH-Power                 DwPCH-Power,
    iE-Extensions                ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

```

```

DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

IPDLParameter-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
  iPDL-TDD-Parameters          IPDL-TDD-Parameters          OPTIONAL,
  iPDL-Indicator                IPDL-Indicator,
  iE-Extensions                 ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

IPDLParameter-Information-LCR-Cell-ReconfRqstTDD ::= SEQUENCE {
  iPDL-TDD-Parameters-LCR      IPDL-TDD-Parameters-LCR      OPTIONAL,
  iPDL-Indicator                IPDL-Indicator,
  iE-Extensions                 ProtocolExtensionContainer { { IPDLParameter-Information-LCR-Cell-ReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

IPDLParameter-Information-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- CELL RECONFIGURATION RESPONSE
--
-- *****

CellReconfigurationResponse ::= SEQUENCE {
  protocolIEs                 ProtocolIE-Container    {{CellReconfigurationResponse-IEs}},
  protocolExtensions          ProtocolExtensionContainer {{CellReconfigurationResponse-Extensions}} OPTIONAL,
  ...
}

CellReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CriticalityDiagnostics      CRITICALITY      ignore          TYPE      CriticalityDiagnostics          PRESENCE optional},
  ...
}

CellReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- CELL RECONFIGURATION FAILURE
--
-- *****

```

```

CellReconfigurationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellReconfigurationFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellReconfigurationFailure-Extensions}}
    ...
}
OPTIONAL,

CellReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-Cause          CRITICALITY   ignore          TYPE      Cause          PRESENCE   mandatory
    }|
    { ID      id-CriticalityDiagnostics  CRITICALITY   ignore          TYPE      CriticalityDiagnostics  PRESENCE optional },
    ...
}

CellReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL DELETION REQUEST
--
-- *****

CellDeletionRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellDeletionRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellDeletionRequest-Extensions}}
    ...
}
OPTIONAL,

CellDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY   reject          TYPE      C-ID          PRESENCE   mandatory},
    ...
}

CellDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL DELETION RESPONSE
--
-- *****

CellDeletionResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellDeletionResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellDeletionResponse-Extensions}}
    ...
}
OPTIONAL,

CellDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics  CRITICALITY   ignore          TYPE      CriticalityDiagnostics  PRESENCE optional},

```

```

}
...
}
CellDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
-- *****
--
-- RESOURCE STATUS INDICATION
--
-- *****

ResourceStatusIndication ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{ResourceStatusIndication-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{ResourceStatusIndication-Extensions}}          OPTIONAL,
  ...
}

ResourceStatusIndication-IEs NBAP-PROTOCOL-IES ::= {
  { ID   id-IndicationType-ResourceStatusInd   CRITICALITY   ignore           TYPE   IndicationType-ResourceStatusInd   PRESENCE
    mandatory   }|
  This IE represents both the Indication Type IE and the choice based on the indication type as described in the tabular message format in
  subclause 9.1.
  { ID   id-Cause                               CRITICALITY   ignore           TYPE   Cause                               PRESENCE
    optional   },
  ...
}

ResourceStatusIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

IndicationType-ResourceStatusInd ::= CHOICE {
  no-Failure          No-Failure-ResourceStatusInd,
  serviceImpacting    ServiceImpacting-ResourceStatusInd,
  ...
}

No-Failure-ResourceStatusInd ::= SEQUENCE {
  local-Cell-InformationList   Local-Cell-InformationList-ResourceStatusInd,
  local-Cell-Group-InformationList   Local-Cell-Group-InformationList-ResourceStatusInd OPTIONAL,
  iE-Extensions                ProtocolExtensionContainer { { No-FailureItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
  ...
}

No-FailureItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID   id-Power-Local-Cell-Group-InformationList-ResourceStatusInd   CRITICALITY   ignore           EXTENSION   Power-Local-
    Cell-Group-InformationList-ResourceStatusInd   PRESENCE   optional   },
  ...
}

```

```
Local-Cell-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-ResourceStatusInd }}
```

```
Local-Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-InformationItem-ResourceStatusInd PRESENCE
  mandatory }
}
```

```
Local-Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
  local-CellID Local-Cell-ID,
  addorDeleteIndicator AddorDeleteIndicator,
  dl-or-global-capacityCredit DL-or-Global-CapacityCredit OPTIONAL,
  -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
  ul-capacityCredit UL-CapacityCredit OPTIONAL,
  commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw OPTIONAL,
  -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
  dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
  -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
  maximumDL-PowerCapability MaximumDL-PowerCapability OPTIONAL,
  -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
  minSpreadingFactor MinSpreadingFactor OPTIONAL,
  -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
  minimumDL-PowerCapability MinimumDL-PowerCapability OPTIONAL,
  -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
  local-Cell-Group-ID Local-Cell-ID OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { Local-Cell-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
  ...
}
```

```
Local-Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-FPACH-LCR-InformationList-ResourceStatusInd CRITICALITY ignore EXTENSION FPACH-LCR-InformationList-ResourceStatusInd
  PRESENCE optional } | -- Applicable to fe 1.28Mcps TDD only
  { ID id-DwPCH-LCR-Information-ResourceStatusInd CRITICALITY ignore EXTENSION DwPCH-LCR-Information-ResourceStatusInd PRESENCE optional
  } | -- Applicable to fe 1.28Mcps TDD only
  { ID id-ReferenceClockAvailability CRITICALITY ignore EXTENSION ReferenceClockAvailability PRESENCE optional } |
  -- This IE shall be present if AddorDeleteIndicator IE is set to "add" and the Local Cell is related to a TDD cell
  { ID id-Power-Local-Cell-Group-ID CRITICALITY ignore EXTENSION Local-Cell-ID PRESENCE optional },
  ...
}
```

```
Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-InformationItemIE-ResourceStatusInd }}
```

```
Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-Group-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-Group-InformationItem-ResourceStatusInd
  PRESENCE mandatory }
}
```

```
Local-Cell-Group-InformationItem-ResourceStatusInd ::= SEQUENCE {
  local-Cell-Group-ID Local-Cell-ID,
  dl-or-global-capacityCredit DL-or-Global-CapacityCredit,
  ul-capacityCredit UL-CapacityCredit OPTIONAL,
  commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw,
```



```

    dedicatedChannelsCapacityConsumptionLaw    DedicatedChannelsCapacityConsumptionLaw,
    iE-Extensions                               ProtocolExtensionContainer { { Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Power-Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-Cell-Group-InformationItemIE-ResourceStatusInd }}

Power-Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Power-Local-Cell-Group-InformationItem-ResourceStatusInd PRESENCE mandatory }
}

Power-Local-Cell-Group-InformationItem-ResourceStatusInd ::= SEQUENCE {
    power-Local-Cell-Group-ID                    Local-Cell-ID,
    maximumDL-PowerCapability                    MaximumDL-PowerCapability,
    iE-Extensions                               ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs } }
    OPTIONAL,
    ...
}

Power-Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ServiceImpacting-ResourceStatusInd ::= SEQUENCE {
    local-Cell-InformationList                    Local-Cell-InformationList2-ResourceStatusInd OPTIONAL,
    local-Cell-Group-InformationList              Local-Cell-Group-InformationList2-ResourceStatusInd OPTIONAL,
    cCP-InformationList                           CCP-InformationList-ResourceStatusInd OPTIONAL,
    cell-InformationList                           Cell-InformationList-ResourceStatusInd OPTIONAL,
    iE-Extensions                               ProtocolExtensionContainer { { ServiceImpactingItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

ServiceImpactingItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd CRITICALITY ignore EXTENSION Power-Local-Cell-Group-InformationList2-ResourceStatusInd PRESENCE optional },
    ...
}

Local-Cell-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE2-ResourceStatusInd }}

Local-Cell-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-InformationItem2-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-InformationItem2-ResourceStatusInd PRESENCE mandatory }
}

Local-Cell-InformationItem2-ResourceStatusInd ::= SEQUENCE {

```

```

local-Cell-ID
dl-or-global-capacityCredit
ul-capacityCredit
commonChannelsCapacityConsumptionLaw
dedicatedChannelsCapacityConsumptionLaw
maximum-DL-PowerCapability
minSpreadingFactor
minimumDL-PowerCapability
iE-Extensions
...
}

Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-ReferenceClockAvailability CRITICALITY ignore EXTENSION ReferenceClockAvailability PRESENCE optional } |
  { ID id-Power-Local-Cell-Group-ID CRITICALITY ignore EXTENSION Local-Cell-ID PRESENCE optional },
  ...
}

Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-
InformationItemIE2-ResourceStatusInd }}

Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-Group-InformationItem2-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-Group-InformationItem2-ResourceStatusInd
  PRESENCE mandatory }
}

Local-Cell-Group-InformationItem2-ResourceStatusInd ::= SEQUENCE {
  local-Cell-Group-ID Local-Cell-ID,
  dl-or-global-capacityCredit DL-or-Global-CapacityCredit OPTIONAL,
  ul-capacityCredit UL-CapacityCredit OPTIONAL,
  commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw OPTIONAL,
  dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs } } OPTIONAL,
  ...
}

Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Power-Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-
Cell-Group-InformationItemIE2-ResourceStatusInd }}

Power-Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd CRITICALITY ignore TYPE Power-Local-Cell-Group-InformationItem2-
ResourceStatusInd PRESENCE mandatory }
}

Power-Local-Cell-Group-InformationItem2-ResourceStatusInd ::= SEQUENCE {
  power-Local-Cell-Group-ID Local-Cell-ID,
  maximumDL-PowerCapability MaximumDL-PowerCapability,
  iE-Extensions ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs } }
  OPTIONAL,
}

```

```

}
...
}
Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
CCP-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-ResourceStatusInd }}
CCP-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-CCP-InformationItem-ResourceStatusInd    CRITICALITY ignore    TYPE CCP-InformationItem-ResourceStatusInd    PRESENCE mandatory }
}
CCP-InformationItem-ResourceStatusInd ::= SEQUENCE {
    communicationControlPortID          CommunicationControlPortID,
    resourceOperationalState            ResourceOperationalState,
    availabilityStatus                   AvailabilityStatus,
    iE-Extensions                        ProtocolExtensionContainer { { CCP-InformationItem-ResourceStatusInd-ExtIEs } }    OPTIONAL,
    ...
}
CCP-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
Cell-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-ResourceStatusInd }}
Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Cell-InformationItem-ResourceStatusInd    CRITICALITY ignore    TYPE Cell-InformationItem-ResourceStatusInd    PRESENCE mandatory }
}
Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
    c-ID                                  C-ID,
    resourceOperationalState              ResourceOperationalState                OPTIONAL,
    availabilityStatus                     AvailabilityStatus                       OPTIONAL,
    primary-SCH-Information                 P-SCH-Information-ResourceStatusInd    OPTIONAL, -- FDD only
    secondary-SCH-Information               S-SCH-Information-ResourceStatusInd    OPTIONAL, -- FDD only
    primary-CPICH-Information               P-CPICH-Information-ResourceStatusInd  OPTIONAL, -- FDD only
    secondary-CPICH-Information             S-CPICH-InformationList-ResourceStatusInd  OPTIONAL, -- FDD only
    primary-CCPCH-Information               P-CCPCH-Information-ResourceStatusInd    OPTIONAL,
    bCH-Information                         BCH-Information-ResourceStatusInd        OPTIONAL,
    secondary-CCPCH-InformationList          S-CCPCH-InformationList-ResourceStatusInd  OPTIONAL,
    pCH-Information                         PCH-Information-ResourceStatusInd        OPTIONAL,
    pICH-Information                         PICH-Information-ResourceStatusInd        OPTIONAL,
    fACH-InformationList                     FACH-InformationList-ResourceStatusInd    OPTIONAL,
    pRACH-InformationList                     PRACH-InformationList-ResourceStatusInd    OPTIONAL,
    rACH-InformationList                     RACH-InformationList-ResourceStatusInd    OPTIONAL,
    aICH-InformationList                     AICH-InformationList-ResourceStatusInd    OPTIONAL, -- FDD only
    pCPCH-InformationList                     PCPCH-InformationList-ResourceStatusInd    OPTIONAL, -- FDD only
    cPCH-InformationList                     CPCH-InformationList-ResourceStatusInd    OPTIONAL, -- FDD only
    aP-AICH-InformationList                   AP-AICH-InformationList-ResourceStatusInd    OPTIONAL, -- FDD only
}

```

```

cDCA-ICH-InformationList          CDCA-ICH-InformationList-ResourceStatusInd    OPTIONAL, -- FDD only
sCH-Information                   SCH-Information-ResourceStatusInd    OPTIONAL, -- Applicable to 3.84Mcps TDD only
iE-Extensions                      ProtocolExtensionContainer { { Cell-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
...
}

Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

P-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-ResourceStatusInd }}

P-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-SCH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-ResourceStatusInd }}

S-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-SCH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CPICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-ResourceStatusInd }}

P-CPICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-CPICH-Information  CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-CPICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-ResourceStatusInd }}

S-CPICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-CPICH-Information  CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CCPCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-ResourceStatusInd }}

P-CCPCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-CCPCH-Information  CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

BCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ BCH-InformationIE-ResourceStatusInd }}

BCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-BCH-Information      CRITICALITY ignore    TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

S-CCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-ResourceStatusInd }}

S-CCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-CCPCH-Information  CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

```

```

PCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PCH-InformationIE-ResourceStatusInd }}

PCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PICH-InformationIE-ResourceStatusInd }}

PICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

FACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-ResourceStatusInd }}

FACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PRACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-ResourceStatusInd }}

PRACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

RACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-ResourceStatusInd }}

RACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-ResourceStatusInd }}

AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

PCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-ResourceStatusInd }}

PCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE optional }
}

CPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-ResourceStatusInd }}

CPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-CPCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE optional }
}

```

```

}

AP-AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-ResourceStatusInd }}

AP-AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-AP-AICH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information                PRESENCE optional }
}

CDCA-ICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-ResourceStatusInd }}

CDCA-ICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-CDCA-ICH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information                PRESENCE optional }
}

SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ SCH-InformationIE-ResourceStatusInd }}

SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-SCH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information                PRESENCE mandatory }
}

FPACH-LCR-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (0..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-ResourceStatusInd }}

FPACH-LCR-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-FPACH-LCR-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information                PRESENCE mandatory }
}

DWPCH-LCR-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ DWPCH-LCR-InformationIE-ResourceStatusInd }}

DWPCH-LCR-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-DWPCH-LCR-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information                PRESENCE mandatory }
}

-- *****
--
-- SYSTEM INFORMATION UPDATE REQUEST
--
-- *****

SystemInformationUpdateRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{SystemInformationUpdateRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{SystemInformationUpdateRequest-Extensions}}
    ...
}

SystemInformationUpdateRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID                CRITICALITY reject    TYPE C-ID                PRESENCE mandatory }|
    { ID id-BCCH-ModificationTime    CRITICALITY reject    TYPE BCCH-ModificationTime    PRESENCE optional }
}|

```

```

{ ID id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst CRITICALITY reject TYPE MIB-SB-SIB-InformationList-
SystemInfoUpdateRqst PRESENCE mandatory },
...
}

SystemInformationUpdateRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

MIB-SB-SIB-InformationList-SystemInfoUpdateRqst ::= SEQUENCE (SIZE (1..maxIB)) OF MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst

MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst ::= SEQUENCE {
  iB-Type IB-Type,
  iB-OC-ID IB-OC-ID,
  deletionIndicator DeletionIndicator-SystemInfoUpdate,
  iE-Extensions ProtocolExtensionContainer { { MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst-ExtIEs} } OPTIONAL,
  ...
}

MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DeletionIndicator-SystemInfoUpdate ::= CHOICE {
  no-Deletion No-Deletion-SystemInfoUpdate,
  yes-Deletion NULL
}

No-Deletion-SystemInfoUpdate ::= SEQUENCE {
  sIB-Originator SIB-Originator OPTIONAL,
  -- This IE shall be present if the IB-Type IE is set to "SIB"
  iB-SG-REP IB-SG-REP OPTIONAL,
  segmentInformationList SegmentInformationList-SystemInfoUpdate,
  iE-Extensions ProtocolExtensionContainer { { No-DeletionItem-SystemInfoUpdate-ExtIEs} } OPTIONAL,
  ...
}

No-DeletionItem-SystemInfoUpdate-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

SegmentInformationList-SystemInfoUpdate ::= ProtocolIE-Single-Container {{ SegmentInformationListIEs-SystemInfoUpdate }}

SegmentInformationListIEs-SystemInfoUpdate NBAP-PROTOCOL-IES ::= {
  { ID id-SegmentInformationListIE-SystemInfoUpdate CRITICALITY reject TYPE SegmentInformationListIE-SystemInfoUpdate PRESENCE mandatory }
}

SegmentInformationListIE-SystemInfoUpdate ::= SEQUENCE (SIZE (1..maxIBSEG)) OF SegmentInformationItem-SystemInfoUpdate

SegmentInformationItem-SystemInfoUpdate ::= SEQUENCE {
  iB-SG-POS IB-SG-POS OPTIONAL,
  segment-Type Segment-Type OPTIONAL,

```

```

-- This IE shall be present if the SIB Originator IE is set to "CRNC" or the IB-Type IE is set to "MIB", "SB1" or "SB2"
iB-SG-DATA          IB-SG-DATA          OPTIONAL,
-- This IE shall be present if the SIB Originator IE is set to "CRNC" or the IB-Type IE is set to "MIB", "SB1" or "SB2"
iE-Extensions      ProtocolExtensionContainer { { SegmentInformationItem-SystemInfoUpdate-ExtIEs } } OPTIONAL,
...
}

SegmentInformationItem-SystemInfoUpdate-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- SYSTEM INFORMATION UPDATE RESPONSE
--
-- *****

SystemInformationUpdateResponse ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container   {{SystemInformationUpdateResponse-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{SystemInformationUpdateResponse-Extensions}}           OPTIONAL,
  ...
}

SystemInformationUpdateResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CriticalityDiagnostics      CRITICALITY      ignore          TYPE      CriticalityDiagnostics      PRESENCE optional},
  ...
}

SystemInformationUpdateResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- SYSTEM INFORMATION UPDATE FAILURE
--
-- *****

SystemInformationUpdateFailure ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container   {{SystemInformationUpdateFailure-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{SystemInformationUpdateFailure-Extensions}}           OPTIONAL,
  ...
}

SystemInformationUpdateFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Cause          CRITICALITY      ignore          TYPE      Cause          PRESENCE mandatory
  }|
  { ID      id-CriticalityDiagnostics      CRITICALITY      ignore          TYPE      CriticalityDiagnostics      PRESENCE optional },
  ...
}

SystemInformationUpdateFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

```



```

}

-- *****
--
-- RADIO LINK SETUP REQUEST FDD
--
-- *****

RadioLinkSetupRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupRequestFDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupRequestFDD-Extensions}}          OPTIONAL,
    ...
}

RadioLinkSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY reject          TYPE          CRNC-CommunicationContextID
      PRESENCE mandatory }|
    { ID id-UL-DPCH-Information-RL-SetupRqstFDD  CRITICALITY reject          TYPE          UL-DPCH-Information-RL-
      PRESENCE mandatory }|
    { ID id-DL-DPCH-Information-RL-SetupRqstFDD  CRITICALITY reject          TYPE          DL-DPCH-Information-RL-
      PRESENCE mandatory }|
    { ID id-DCH-FDD-Information                  CRITICALITY reject          TYPE          DCH-FDD-Information          PRESENCE mandatory }|
    { ID id-DSCH-FDD-Information                 CRITICALITY reject          TYPE          DSCH-FDD-Information        PRESENCE optional }|
    { ID id-TFCI2-Bearer-Information-RL-SetupRqstFDD CRITICALITY ignore          TYPE          TFCI2-Bearer-Information-RL-
      PRESENCE optional }|
    { ID id-RL-InformationList-RL-SetupRqstFDD   CRITICALITY notify          TYPE          RL-InformationList-RL-
      PRESENCE mandatory }|
    { ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject          TYPE          Transmission-Gap-Pattern-Sequence-Information
      PRESENCE optional }|
    { ID id-Active-Pattern-Sequence-Information   CRITICALITY reject          TYPE          Active-Pattern-Sequence-Information PRESENCE
      optional },
    ...
}

RadioLinkSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DSCH-FDD-Common-Information          CRITICALITY ignore          EXTENSION DSCH-FDD-Common-Information          PRESENCE optional
    }|
    { ID id-DL-PowerBalancing-Information       CRITICALITY ignore          EXTENSION DL-PowerBalancing-Information        PRESENCE optional }|
    { ID id-HSDSCH-FDD-Information              CRITICALITY reject          EXTENSION HSDSCH-FDD-Information              PRESENCE optional }|
    { ID id-HSDSCH-RNTI                        CRITICALITY reject          EXTENSION HSDSCH-RNTI                        PRESENCE optional }|
    { ID id-HSPDSCH-RL-ID                      CRITICALITY reject          EXTENSION RL-ID                              PRESENCE conditional },
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    ul-ScramblingCode          UL-ScramblingCode,
    minUL-ChannelisationCodeLength  MinUL-ChannelisationCodeLength,
    maxNrOfUL-DPDCHs           MaxNrOfUL-DPDCHs          OPTIONAL,
    -- This IE shall be present if Min UL Channelisation Code length IE is set to 4 --
    ul-PunctureLimit           PunctureLimit,
    tFCS                       TFCS,
    ul-DPCCH-SlotFormat        UL-DPCCH-SlotFormat,
    ul-SIR-Target              UL-SIR,

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```

diversityMode          DiversityMode,
sSDT-CellID-Length    SSDT-CellID-Length    OPTIONAL,
s-FieldLength         S-FieldLength        OPTIONAL,
iE-Extensions         ProtocolExtensionContainer { { UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  {ID id-DPC-Mode      CRITICALITY reject  EXTENSION  DPC-Mode    PRESENCE optional  },
  ...
}

DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
  tFCS                  TFCS,
  dl-DPCH-SlotFormat    DL-DPCH-SlotFormat,
  tFCI-SignallingMode   TFCI-SignallingMode,
  tFCI-Presence         TFCI-Presence    OPTIONAL,
  -- this IE shall be present if the DL DPCH slot format IE is set to any of the values from 12 to 16 --
  multiplexingPosition MultiplexingPosition,
  pDSCH-RL-ID           RL-ID            OPTIONAL,
  -- This IE shall be present if the DSCH Information IE is present --
  pDSCH-CodeMapping     PDSCH-CodeMapping  OPTIONAL,
  -- This IE shall be present if the DSCH Information IE is present --
  powerOffsetInformation PowerOffsetInformation-RL-SetupRqstFDD,
  fdd-TPC-DownlinkStepSize FDD-TPC-DownlinkStepSize,
  limitedPowerIncrease  LimitedPowerIncrease,
  innerLoopDLPCStatus   InnerLoopDLPCStatus,
  iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PowerOffsetInformation-RL-SetupRqstFDD ::= SEQUENCE {
  pO1-ForTFCI-Bits     PowerOffset,
  pO2-ForTPC-Bits      PowerOffset,
  pO3-ForPilotBits     PowerOffset,
  iE-Extensions         ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TFCI2-Bearer-Information-RL-SetupRqstFDD ::= SEQUENCE {
  toAWS                ToAWS,
  toAWE                ToAWE,
  iE-Extensions         ProtocolExtensionContainer { { TFCI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

TFCI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF
    ProtocolIE-Single-Container{{ RL-InformationItemIE-RL-SetupRqstFDD }}

RL-InformationItemIE-RL-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-SetupRqstFDD          CRITICALITY    notify          TYPE          RL-InformationItem-RL-
SetupRqstFDD          PRESENCE    mandatory}
}

RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    c-ID                 C-ID,
    firstRLS-indicator   FirstRLS-Indicator,
    frameOffset          FrameOffset,
    chipOffset           ChipOffset,
    propagationDelay     PropagationDelay          OPTIONAL,
    diversityControlField DiversityControlField    OPTIONAL,
    -- This IE shall be present if the RL is not the first one in the RL Information IE
    dl-CodeInformation   FDD-DL-CodeInformation,
    initialDL-transmissionPower DL-Power,
    maximumDL-power     DL-Power,
    minimumDL-power     DL-Power,
    sSDT-Cell-Identity   SSdT-Cell-Identity          OPTIONAL,
    transmitDiversityIndicator TransmitDiversityIndicator    OPTIONAL,
    -- This IE shall be present if Diversity Mode IE in UL DPCH Information group is not set to "none"
    iE-Extensions       ProtocolExtensionContainer { { RL-InformationItem-RL-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

RL-InformationItem-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SSDT-CellIDforEDSCHPC CRITICALITY ignore EXTENSION SSdT-Cell-Identity          PRESENCE conditional }|
    -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Common Information IE.
    { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info          PRESENCE optional }|
    { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional },
    ...
}

-- *****
--
-- RADIO LINK SETUP REQUEST TDD
--
-- *****

RadioLinkSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}}    OPTIONAL,
    ...
}

```

```

RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID          CRITICALITY reject          TYPE          CRNC-CommunicationContextID
    PRESENCE mandatory }|
  { ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify          TYPE          UL-CCTrCH-InformationList-RL-
SetupRqstTDD PRESENCE optional }|
  { ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify          TYPE          DL-CCTrCH-InformationList-RL-
SetupRqstTDD PRESENCE optional }|
  { ID id-DCH-TDD-Information          CRITICALITY reject          TYPE          DCH-TDD-Information          PRESENCE optional }|
  { ID id-DSCH-TDD-Information          CRITICALITY reject          TYPE          DSCH-TDD-Information          PRESENCE optional }|
  { ID id-USCH-Information          CRITICALITY reject          TYPE          USCH-Information          PRESENCE optional }|
  { ID id-RL-Information-RL-SetupRqstTDD CRITICALITY reject          TYPE          RL-Information-RL-SetupRqstTDD
    PRESENCE mandatory },
  ...
}

RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-HSDSCH-TDD-Information          CRITICALITY reject          EXTENSION HSDSCH-TDD-Information          PRESENCE optional }|
  { ID id-HSDSCH-RNTI          CRITICALITY reject          EXTENSION HSDSCH-RNTI          PRESENCE optional }|
  { ID id-HSPDSCH-RL-ID          CRITICALITY reject          EXTENSION RL-ID          PRESENCE conditional },
  ...
}

UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
  ProtocolIE-Single-Container{{ UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify          TYPE          UL-CCTrCH-InformationItem-RL-
SetupRqstTDD PRESENCE mandatory }
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  tFCS          TFCS,
  tFCI-Coding          TFCI-Coding,
  punctureLimit          PunctureLimit,
  uL-DPCH-Information          UL-DPCH-Information-RL-SetupRqstTDD OPTIONAL, -- Applicable to For 3.84Mcps TDD only
  iE-Extensions          ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify          EXTENSION          UL-DPCH-LCR-Information-RL-SetupRqstTDD PRESENCE optional
  }| -- Applicable to For 1.28Mcps TDD only
  { ID id-UL-SIRTarget          CRITICALITY reject          EXTENSION          UL-SIR          PRESENCE optional          },
  -- This IE shall be mandatory for 1.28Mcps TDD, and not applicable for 3.84Mcps TDD.
  ...
}

UL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationList-RL-SetupRqstTDD CRITICALITY notify          TYPE          UL-DPCH-InformationItem-RL-SetupRqstTDD PRESENCE mandatory }
}

```

```

UL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    uL-Timeslot-Information    UL-Timeslot-Information,
    iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD      CRITICALITY notify TYPE UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD      PRESENCE
optional      }
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    uL-TimeslotLCR-Information UL-TimeslotLCR-Information,
    iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container{{ DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD      CRITICALITY notify TYPE DL-CCTrCH-InformationItem-RL-SetupRqstTDD      PRESENCE mandatory}
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCtRCH-ID                CCTrCH-ID,
    tFCS                      TFCS,
    tFCI-Coding               TFCI-Coding,
    punctureLimit             PunctureLimit,
    tdd-TPC-DownlinkStepSize  TDD-TPC-DownlinkStepSize,
    cCtRCH-TPCList            CCTrCH-TPCList-RL-SetupRqstTDD OPTIONAL,
    dL-DPCH-Information        DL-DPCH-Information-RL-SetupRqstTDD OPTIONAL, -- Applicable to Foe 3.84Mcps TDD only
    iE-Extensions              ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify      EXTENSION  DL-DPCH-LCR-Information-RL-SetupRqstTDD  PRESENCE optional
  } | -- Applicable to Foe 1.28Mcps TDD only
  { ID id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD      CRITICALITY ignore      EXTENSION DL-Power      PRESENCE optional },
  ...
}

CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD

CCTrCH-TPCItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCCTrCH-ID          CCTrCH-ID,
  iE-Extensions      ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationList-RL-SetupRqstTDD      CRITICALITY notify  TYPE DL-DPCH-InformationItem-RL-SetupRqstTDD      PRESENCE mandatory  }
}

DL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  dL-Timeslot-Information  DL-Timeslot-Information,
  iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD      CRITICALITY notify  TYPE DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD      PRESENCE
mandatory  }
}

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  dL-TimeslotLCR-Information  DL-TimeslotLCR-Information,
  tstdIndicator          TSTD-Indicator,
  iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
}

```

```

}
...
DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
  rL-ID                RL-ID,
  c-ID                C-ID,
  frameOffset         FrameOffset,
  specialBurstScheduling SpecialBurstScheduling,
  initialDL-transmissionPower DL-Power,
  maximumDL-power    DL-Power,
  minimumDL-power    DL-Power,
  dL-TimeSlotISCPInfo DL-TimeSlotISCPInfo OPTIONAL, -- Applicable to For 3.84Mcps TDD only
  iE-Extensions      ProtocolExtensionContainer { { RL-Information-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
...
}

RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeSlotISCP-LCR-InfoList-RL-SetupRqstTDD CRITICALITY reject EXTENSION TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD PRESENCE
optional }| -- Applicable to For 1.28Mcps TDD only
  { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional }|
  { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional },
...
}

TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD ::= SEQUENCE {
  dL-TimeSlotISCP-LCR-Info DL-TimeSlotISCPInfoLCR,
  iE-Extensions          ProtocolExtensionContainer { {TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
...
}

TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- RADIO LINK SETUP RESPONSE FDD
--
-- *****

RadioLinkSetupResponseFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{RadioLinkSetupResponseFDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupResponseFDD-Extensions}}
...
}

RadioLinkSetupResponseFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID CRITICALITY ignore TYPE CRNC-CommunicationContextID
PRESENCE mandatory }|

```

```

{ ID id-NodeB-CommunicationContextID CRITICALITY ignore TYPE NodeB-CommunicationContextID
  PRESENCE mandatory }|
{ ID id-CommunicationControlPortID CRITICALITY ignore TYPE CommunicationControlPortID
  PRESENCE mandatory }|
{ ID id-RL-InformationResponseList-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseList-RL-
SetupRspFDD PRESENCE mandatory }|
{ ID id-TFCI2-BearerInformationResponse CRITICALITY ignore TYPE TFCI2-BearerInformationResponse PRESENCE optional }|
{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics
  PRESENCE optional },
...
}

RadioLinkSetupResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container{{ RL-InformationResponseItemIE-RL-
SetupRspFDD }}

RL-InformationResponseItemIE-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponseItem-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseItem-RL-
SetupRspFDD PRESENCE mandatory }
}

RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
  rL-ID RL-ID,
  rL-Set-ID RL-Set-ID,
  received-total-wide-band-power Received-total-wide-band-power-Value,
  diversityIndication DiversityIndication-RL-SetupRspFDD,
  This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
  the tabular message format in subclause 9.1.
  dSCH-InformationResponseList DSCH-InformationResponseList-RL-SetupRspFDD OPTIONAL,
  sSDT-SupportIndicator SSDT-SupportIndicator,
  iE-Extensions ProtocolExtensionContainer { { RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
  ...
}

RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE
optional }|
  { ID id-HSDSCH-FDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-FDD-Information-Response PRESENCE optional },
  ...
}

DiversityIndication-RL-SetupRspFDD ::= CHOICE {
  combining Combining-RL-SetupRspFDD,
  nonCombiningOrFirstRL NonCombiningOrFirstRL-RL-SetupRspFDD
}

Combining-RL-SetupRspFDD ::= SEQUENCE {
  rL-ID RL-ID,
  iE-Extensions ProtocolExtensionContainer { { Combining-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
  ...
}

```



```

}

Combining-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

NonCombiningOrFirstRL-RL-SetupRspFDD ::= SEQUENCE {
  dCH-InformationResponse          DCH-InformationResponse,
  iE-Extensions                    ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
  ...
}

NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DSCH-InformationResponseList-RL-SetupRspFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupRspFDD }}

DSCH-InformationResponseListIEs-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationResponse CRITICALITY ignore TYPE DSCH-InformationResponse PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK SETUP RESPONSE TDD
--
-- *****

RadioLinkSetupResponseTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container {{RadioLinkSetupResponseTDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupResponseTDD-Extensions}} OPTIONAL,
  ...
}

RadioLinkSetupResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID CRITICALITY ignore TYPE CRNC-CommunicationContextID PRESENCE mandatory }|
  { ID id-NodeB-CommunicationContextID CRITICALITY ignore TYPE NodeB-CommunicationContextID PRESENCE mandatory }|
  { ID id-CommunicationControlPortID CRITICALITY ignore TYPE CommunicationControlPortID PRESENCE mandatory }|
  { ID id-RL-InformationResponse-RL-SetupRspTDD CRITICALITY ignore TYPE RL-InformationResponse-RL-SetupRspTDD PRESENCE optional }| -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
  { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

RadioLinkSetupResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-RL-InformationResponse-LCR-RL-SetupRspTDD CRITICALITY ignore EXTENSION RL-InformationResponse-LCR-RL-SetupRspTDD PRESENCE optional }, -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
  ...
}

```

```

RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
    rL-ID                               RL-ID,
    uL-TimeSlot-ISCP-Info                UL-TimeSlot-ISCP-Info,
    ul-PhysCH-SF-Variation               UL-PhysCH-SF-Variation,
    dCH-InformationResponseList          DCH-InformationResponseList-RL-SetupRspTDD           OPTIONAL,
    dSCH-InformationResponseList         DSCH-InformationResponseList-RL-SetupRspTDD           OPTIONAL,
    uSCH-InformationResponseList         USCH-InformationResponseList-RL-SetupRspTDD           OPTIONAL,
    iE-Extensions                        ProtocolExtensionContainer { { RL-InformationResponseList-RL-SetupRspTDD-ExtIEs } }   OPTIONAL,
    ...
}

RL-InformationResponseList-RL-SetupRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-TDD-Information-Response          CRITICALITY ignore          EXTENSION HSDSCH-TDD-Information-Response          PRESENCE optional },
    ...
}

DCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container{{ DCH-InformationResponseListIEs-RL-SetupRspTDD }}

DCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse          CRITICALITY ignore          TYPE          DCH-InformationResponse          PRESENCE          mandatory}
}

DSCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupRspTDD }}

DSCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationResponse          CRITICALITY ignore          TYPE DSCH-InformationResponse          PRESENCE mandatory }
}

USCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-SetupRspTDD }}

USCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
    { ID id-USCH-InformationResponse          CRITICALITY ignore          TYPE USCH-InformationResponse          PRESENCE mandatory }
}

RL-InformationResponse-LCR-RL-SetupRspTDD ::= SEQUENCE {
    rL-ID                               RL-ID,
    uL-TimeSlot-ISCP-LCR-Info           UL-TimeSlot-ISCP-LCR-Info,
    ul-PhysCH-SF-Variation              UL-PhysCH-SF-Variation,
    dCH-InformationResponseList          DCH-InformationResponseList-RL-SetupRspTDD           OPTIONAL,
    dSCH-InformationResponseList         DSCH-InformationResponseList-RL-SetupRspTDD           OPTIONAL,
    uSCH-InformationResponseList         USCH-InformationResponseList-RL-SetupRspTDD           OPTIONAL,
    iE-Extensions                        ProtocolExtensionContainer { { RL-InformationResponseList-LCR-RL-SetupRspTDD-ExtIEs } }   OPTIONAL,
    ...
}

RL-InformationResponseList-LCR-RL-SetupRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-TDD-Information-Response-LCR          CRITICALITY ignore          EXTENSION HSDSCH-TDD-Information-Response          PRESENCE optional },
    ...
}

-- *****

```

```

--
-- RADIO LINK SETUP FAILURE FDD
--
-- *****

RadioLinkSetupFailureFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupFailureFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}}      OPTIONAL,
    ...
}

RadioLinkSetupFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE CRNC-
CommunicationContextID          PRESENCE mandatory }|
    { ID id-NodeB-CommunicationContextID        CRITICALITY ignore          TYPE NodeB-
CommunicationContextID          PRESENCE conditional }|
    -- This IE shall be present if at least one of the radio links has been successfully set up
    { ID id-CommunicationControlPortID          CRITICALITY ignore          TYPE
CommunicationControlPortID      PRESENCE optional }|
    { ID id-CauseLevel-RL-SetupFailureFDD       CRITICALITY ignore          TYPE CauseLevel-RL-
SetupFailureFDD PRESENCE mandatory }|
    { ID id-CriticalityDiagnostics              CRITICALITY ignore          TYPE
CriticalityDiagnostics          PRESENCE optional },
    ...
}

RadioLinkSetupFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CauseLevel-RL-SetupFailureFDD ::= CHOICE {
    generalCause          GeneralCauseList-RL-SetupFailureFDD,
    rLSpecificCause      RLSpecificCauseList-RL-SetupFailureFDD,
    ...
}

GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    cause                 Cause,
    iE-Extensions         ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

GeneralCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-SetupFailureFDD, Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD,
    successful-RL-InformationRespList-RL-SetupFailureFDD      Successful-RL-InformationRespList-RL-SetupFailureFDD OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}

Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD CRITICALITY ignore TYPE Unsuccessful-RL-
InformationRespItem-RL-SetupFailureFDD PRESENCE mandatory}
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID RL-ID,
    cause Cause,
    iE-Extensions ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
    OPTIONAL,
    ...
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Successful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1.. maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}

Successful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-Successful-RL-InformationRespItem-RL-SetupFailureFDD CRITICALITY ignore TYPE Successful-RL-
InformationRespItem-RL-SetupFailureFDD PRESENCE mandatory}
}

Successful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID RL-ID,
    rL-Set-ID RL-Set-ID,
    received-total-wide-band-power Received-total-wide-band-power-Value,
    diversityIndication DiversityIndication-RL-SetupFailureFDD,
    
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
    
    dSCH-InformationResponseList DSCH-InformationRespList-RL-SetupFailureFDD OPTIONAL,
    tFCI2-BearerInformationResponse TFCI2-BearerInformationResponse OPTIONAL,
    sSDT-SupportIndicator SSDT-SupportIndicator,
    iE-Extensions ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
    OPTIONAL,
    ...
}

Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE
optional} |
    { ID id-HSDSCH-FDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-FDD-Information-Response PRESENCE optional },
    ...
}

```

```

DiversityIndication-RL-SetupFailureFDD ::= CHOICE {
    combining                Combining-RL-SetupFailureFDD,
    nonCombiningOrFirstRL    NonCombiningOrFirstRL-RL-SetupFailureFDD
}

Combining-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID                    RL-ID,
    iE-Extensions            ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs} }    OPTIONAL,
    ...
}

CombiningItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE {
    dCH-InformationResponse  DCH-InformationResponse,
    iE-Extensions            ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs} }
    OPTIONAL,
    ...
}

NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-InformationRespList-RL-SetupFailureFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationRespListIEs-RL-SetupFailureFDD }}

DSCH-InformationRespListIEs-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationResponse    CRITICALITY ignore    TYPE DSCH-InformationResponse    PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK SETUP FAILURE TDD
--
-- *****

RadioLinkSetupFailureTDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkSetupFailureTDD-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{RadioLinkSetupFailureTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkSetupFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID    CRITICALITY ignore    TYPE CRNC-CommunicationContextID
      PRESENCE mandatory }|
    { ID id-CauseLevel-RL-SetupFailureTDD    CRITICALITY ignore    TYPE CauseLevel-RL-
      SetupFailureTDD    PRESENCE mandatory }|
    { ID id-CriticalityDiagnostics    CRITICALITY ignore    TYPE CriticalityDiagnostics
      PRESENCE optional },
    ...
}

```

```

}

RadioLinkSetupFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CauseLevel-RL-SetupFailureTDD ::= CHOICE {
  generalCause      GeneralCauseList-RL-SetupFailureTDD,
  rLSpecificCause   RLSpecificCauseList-RL-SetupFailureTDD,
  ...
}

GeneralCauseList-RL-SetupFailureTDD ::= SEQUENCE {
  cause             Cause,
  iE-Extensions    ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureTDD-ExtIEs} } OPTIONAL,
  ...
}

GeneralCauseItem-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RLSpecificCauseList-RL-SetupFailureTDD ::= SEQUENCE {
  unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD,
  iE-Extensions    ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs} } OPTIONAL,
  ...
}

RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD} }

Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD NBAP-PROTOCOL-IES ::= {
  { ID      id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD      CRITICALITY ignore      TYPE      Unsuccessful-RL-InformationResp-RL-SetupFailureTDD      PRESENCE      mandatory }
}

Unsuccessful-RL-InformationResp-RL-SetupFailureTDD ::= SEQUENCE {
  rL-ID          RL-ID,
  cause          Cause,
  iE-Extensions ProtocolExtensionContainer { { Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs} } OPTIONAL,
  ...
}

Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```
-- *****
--
-- RADIO LINK ADDITION REQUEST FDD
--
-- *****
```

```
RadioLinkAdditionRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkAdditionRequestFDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkAdditionRequestFDD-Extensions}}
    OPTIONAL,
    ...
}
```

```
RadioLinkAdditionRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY reject          TYPE NodeB-CommunicationContextID          PRESENCE
    mandatory } |
    { ID id-Compressed-Mode-Deactivation-Flag      CRITICALITY reject          TYPE Compressed-Mode-Deactivation-Flag      PRESENCE optional } |
    { ID id-RL-InformationList-RL-AdditionRqstFDD  CRITICALITY notify          TYPE          RL-InformationList-RL-
    AdditionRqstFDD          PRESENCE mandatory } ,
    ...
}
```

```
RadioLinkAdditionRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
RL-InformationList-RL-AdditionRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-
    AdditionRqstFDD}}
```

```
RL-InformationItemIE-RL-AdditionRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-AdditionRqstFDD  CRITICALITY notify          TYPE          RL-InformationItem-RL-
    AdditionRqstFDD          PRESENCE mandatory }
}
```

```
RL-InformationItem-RL-AdditionRqstFDD ::= SEQUENCE {
    rL-ID          RL-ID,
    c-ID          C-ID,
    frameOffset    FrameOffset,
    chipOffset     ChipOffset,
    diversityControlField DiversityControlField,
    dl-CodeInformation FDD-DL-CodeInformation,
    initialDL-TransmissionPower DL-Power          OPTIONAL,
    maximumDL-Power DL-Power          OPTIONAL,
    minimumDL-Power DL-Power          OPTIONAL,
    sSDT-CellIdentity SSDT-Cell-Identity OPTIONAL,
    transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
    iE-Extensions  ProtocolExtensionContainer { { RL-InformationItem-RL-AdditionRqstFDD-ExtIEs } } OPTIONAL,
    ...
}
```

```
RL-InformationItem-RL-AdditionRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DLReferencePower CRITICALITY ignore EXTENSION DL-Power PRESENCE optional } |
    { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional } |
    { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional } ,
}
```

```

}
...
-- *****
--
-- RADIO LINK ADDITION REQUEST TDD
--
-- *****

RadioLinkAdditionRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkAdditionRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-Extensions}}          OPTIONAL,
    ...
}

RadioLinkAdditionRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY reject          TYPE NodeB-
CommunicationContextID          PRESENCE mandatory }|
    { ID id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD          CRITICALITY reject          TYPE UL-CCTrCH-InformationList-
RL-AdditionRqstTDD          PRESENCE optional }|
    { ID id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD          CRITICALITY reject          TYPE DL-CCTrCH-InformationList-
RL-AdditionRqstTDD          PRESENCE optional }|
    { ID id-RL-Information-RL-AdditionRqstTDD          CRITICALITY reject          TYPE RL-Information-RL-
AdditionRqstTDD          PRESENCE mandatory },
    ...
}

RadioLinkAdditionRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-AdditionRqstTDD

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    uL-DPCH-Information          UL-DPCH-InformationList-RL-AdditionRqstTDD          OPTIONAL, -- Applicable to 3.84cps TDD only
    iE-Extensions          ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} }          OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
    { ID id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD          CRITICALITY notify          EXTENSION UL-DPCH-
InformationItem-LCR-RL-AdditionRqstTDD          PRESENCE optional }, -- Applicable to For 1.28cps TDD only
}

UL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}

UL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationItem-RL-AdditionRqstTDD          CRITICALITY notify          TYPE UL-DPCH-InformationItem-RL-
AdditionRqstTDD          PRESENCE optional } -- For 3.84Mcps TDD only
}

```



```

UL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    uL-Timeslot-Information    UL-Timeslot-Information,
    iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-AdditionRqstTDD

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID                  CCTrCH-ID,
    dL-DPCH-Information        DL-DPCH-InformationList-RL-AdditionRqstTDD OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD CRITICALITY notify EXTENSION DL-DPCH-
InformationItem-LCR-RL-AdditionRqstTDD PRESENCE optional }| -- Applicable to Fee 1.28Mcps TDD only
    { ID id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional },
    ...
}

DL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}

DL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationItem-RL-AdditionRqstTDD CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-
AdditionRqstTDD PRESENCE mandatory } -- Applicable to Fee 3.84Mcps TDD only
}

DL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    dL-Timeslot-Information    DL-Timeslot-Information,
    iE-Extensions              ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-AdditionRqstTDD ::= SEQUENCE {
    rL-ID                      RL-ID,
    c-ID                        C-ID,
    frameOffset                 FrameOffset,
}

```

```

diversityControlField          DiversityControlField,
initial-DL-Transmission-Power DL-Power          OPTIONAL,
maximumDL-Power                DL-Power          OPTIONAL,
minimumDL-Power                DL-Power          OPTIONAL,
dL-TimeslotISCPInfo            DL-TimeslotISCPInfo OPTIONAL, -- Applicable to Fes 3.84Mcps TDD only
iE-Extensions                  ProtocolExtensionContainer { { RL-information-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
...
}

RL-information-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD CRITICALITY notify EXTENSION TIMESLOTISCP-
InformationList-LCR-RL-AdditionRqstTDD PRESENCE optional }| -- Applicable to Fes 1.28Mcps TDD only
  { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional }|
  { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional },
  ...
}

UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  uL-TimeslotLCR-Information UL-TimeslotLCR-Information,
  iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  dL-TimeslotLCR-Information DL-TimeslotLCR-Information,
  iE-Extensions            ProtocolExtensionContainer { { DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TIMESLOTISCP-InformationList-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
  dL-TimeslotISCP-LCR-Info DL-TimeslotISCPInfoLCR,
  iE-Extensions            ProtocolExtensionContainer { {TimeslotISCPInfoList-LCR-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

TimeslotISCPInfoList-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

-- *****
--
-- RADIO LINK ADDITION RESPONSE FDD
--
-- *****

RadioLinkAdditionResponseFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkAdditionResponseFDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-Extensions}} OPTIONAL,
    ...
}

RadioLinkAdditionResponseFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID PRESENCE mandatory CRITICALITY ignore TYPE CRNC-
CommunicationContextID }},
    { ID id-RL-InformationResponseList-RL-AdditionRspFDD PRESENCE mandatory CRITICALITY ignore TYPE RL-
InformationResponseList-RL-AdditionRspFDD }},
    { ID id-CriticalityDiagnostics PRESENCE optional },
    ...
}

RadioLinkAdditionResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-
RL-AdditionRspFDD }}

RL-InformationResponseItemIE-RL-AdditionRspFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-AdditionRspFDD PRESENCE mandatory CRITICALITY ignore TYPE RL-InformationResponseItem-
RL-AdditionRspFDD }
}

RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
    rL-ID RL-ID,
    rL-Set-ID RL-Set-ID,
    received-total-wide-band-power Received-total-wide-band-power-Value,
    diversityIndication DiversityIndication-RL-AdditionRspFDD,
    sSDT-SupportIndicator SSdT-SupportIndicator,
    iE-Extensions ProtocolExtensionContainer { { RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} }
OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE
optional},
    ...
}

```

~~This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in the tabular message format in subclause 9.1.~~

```

DiversityIndication-RL-AdditionRspFDD ::= CHOICE {
    combining
    non-combining
}

Combining-RL-AdditionRspFDD ::= SEQUENCE {
    rL-ID
    iE-Extensions
    ...
    RL-ID,
    ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
}

CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Non-Combining-RL-AdditionRspFDD ::= SEQUENCE {
    dCH-InformationResponse
    iE-Extensions
    ...
    DCH-InformationResponse,
    ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
}

Non-CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK ADDITION RESPONSE TDD
--
-- *****

RadioLinkAdditionResponseTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkAdditionResponseTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkAdditionResponseTDD-Extensions}}
    ...
}

RadioLinkAdditionResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE          CRNC-CommunicationContextID
      PRESENCE mandatory }|
    { ID id-RL-InformationResponse-RL-AdditionRspTDD  CRITICALITY ignore          TYPE          RL-InformationResponse-RL-
    AdditionRspTDD PRESENCE optional }| -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
    { ID id-CriticalityDiagnostics                CRITICALITY ignore          TYPE          CriticalityDiagnostics
      PRESENCE optional },
    ...
}

RadioLinkAdditionResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-InformationResponse-LCR-RL-AdditionRspTDD  CRITICALITY ignore          EXTENSION          RL-InformationResponse-LCR-RL-
    AdditionRspTDD PRESENCE optional }, -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
    ...
}

```

```

RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    uL-TimeSlot-ISCP-Info    UL-TimeSlot-ISCP-Info,
    ul-PhysCH-SF-Variation    UL-PhysCH-SF-Variation,
    dCH-Information        DCH-Information-RL-AdditionRspTDD    OPTIONAL,
    dSCH-InformationResponseList    DSCH-InformationResponseList-RL-AdditionRspTDD    OPTIONAL,
    uSCH-InformationResponseList    USCH-InformationResponseList-RL-AdditionRspTDD    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { RL-InformationResponse-RL-AdditionRspTDD-ExtIEs } }    OPTIONAL,
    ...
}

RL-InformationResponse-RL-AdditionRspTDD-ExtIEs    NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
    diversityIndication    DiversityIndication-RL-AdditionRspTDD,
    This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    the tabular message format in subclause 9.1.
    iE-Extensions        ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs } }    OPTIONAL,
    ...
}

DCH-Information-RL-AdditionRspTDD-ExtIEs    NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-AdditionRspTDD ::= CHOICE {
    combining                Combining-RL-AdditionRspTDD,
    non-Combining            Non-Combining-RL-AdditionRspTDD
}

Combining-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    iE-Extensions        ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs } }    OPTIONAL,
    ...
}

CombiningItem-RL-AdditionRspTDD-ExtIEs    NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Non-Combining-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-InformationResponse    DCH-InformationResponse,
    iE-Extensions        ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspTDD-ExtIEs } }    OPTIONAL,
    ...
}

Non-CombiningItem-RL-AdditionRspTDD-ExtIEs    NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-AdditionRspTDD }}

```

```

DSCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationResponse  CRITICALITY ignore  TYPE DSCH-InformationResponse  PRESENCE mandatory }
}

USCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-AdditionRspTDD }}

USCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
  { ID id-USCH-InformationResponse  CRITICALITY ignore  TYPE USCH-InformationResponse  PRESENCE mandatory }
}

RL-InformationResponse-LCR-RL-AdditionRspTDD ::= SEQUENCE {
  rL-ID                RL-ID,
  uL-TimeSlot-ISCP-InfoLCR  UL-TimeSlot-ISCP-LCR-Info,
  ul-PhysCH-SF-Variation  UL-PhysCH-SF-Variation,
  dCH-Information        DCH-Information-RL-AdditionRspTDD          OPTIONAL,
  dSCH-InformationResponseList  DSCH-InformationResponseList-RL-AdditionRspTDD  OPTIONAL,
  uSCH-InformationResponseList  USCH-InformationResponseList-RL-AdditionRspTDD  OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { { RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIEs} }  OPTIONAL,
  ...
}

RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK ADDITION FAILURE FDD
--
-- *****

RadioLinkAdditionFailureFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{RadioLinkAdditionFailureFDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{RadioLinkAdditionFailureFDD-Extensions}}  OPTIONAL,
  ...
}

RadioLinkAdditionFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID  CRITICALITY  ignore  TYPE  CRNC-CommunicationContextID  PRESENCE mandatory }|
  { ID id-CauseLevel-RL-AdditionFailureFDD  CRITICALITY  ignore  TYPE  CauseLevel-RL-AdditionFailureFDD  PRESENCE mandatory }|
  { ID id-CriticalityDiagnostics  CRITICALITY  ignore  TYPE  CriticalityDiagnostics  PRESENCE optional }|
  },
  ...
}

RadioLinkAdditionFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CauseLevel-RL-AdditionFailureFDD ::= CHOICE {
  generalCause          GeneralCauseList-RL-AdditionFailureFDD,
  rLspecificCause       RLspecificCauseList-RL-AdditionFailureFDD,
}

```

```

}
...
}
GeneralCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    cause Cause,
    iE-Extensions ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs } } OPTIONAL,
    ...
}
GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
RLSpecificCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD,
    successful-RL-InformationRespList-RL-AdditionFailureFDD Successful-RL-InformationRespList-RL-AdditionFailureFDD OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs } } OPTIONAL,
    ...
}
RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}
Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Unsuccessful-RL-
InformationRespItem-RL-AdditionFailureFDD PRESENCE mandatory}
}
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
    rL-ID RL-ID,
    cause Cause,
    iE-Extensions ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs } }
    OPTIONAL,
    ...
}
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
Successful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-2)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}
Successful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Successful-RL-
InformationRespItem-RL-AdditionFailureFDD PRESENCE mandatory}
}
Successful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {

```

```

rL-ID                RL-ID,
rL-Set-ID            RL-Set-ID,
received-total-wide-band-power  Received-total-wide-band-power-Value,
diversityIndication DiversityIndication-RL-AdditionFailureFDD,
This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
the tabular message format in subclause 9.1.
sSDT-SupportIndicator  SSDT-SupportIndicator,
iE-Extensions          ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs } }
OPTIONAL,
...
}

Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-PowerBalancing-ActivationIndicator  CRITICALITY ignore      EXTENSION      DL-PowerBalancing-ActivationIndicator  PRESENCE
optional},
  ...
}

DiversityIndication-RL-AdditionFailureFDD ::= CHOICE {
  combining              Combining-RL-AdditionFailureFDD,
  non-Combining          Non-Combining-RL-AdditionFailureFDD
}

Combining-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID                RL-ID,
  iE-Extensions          ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-ExtIEs } }      OPTIONAL,
  ...
}

CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Non-Combining-RL-AdditionFailureFDD ::= SEQUENCE {
  dCH-InformationResponse  DCH-InformationResponse,
  iE-Extensions            ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs } }      OPTIONAL,
  ...
}

Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK ADDITION FAILURE TDD
--
-- *****

RadioLinkAdditionFailureTDD ::= SEQUENCE {
  protocolIEs            ProtocolIE-Container  {{RadioLinkAdditionFailureTDD-IEs}},
  protocolExtensions     ProtocolExtensionContainer  {{RadioLinkAdditionFailureTDD-Extensions}}      OPTIONAL,
  ...
}

```



```

}

RadioLinkAdditionFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID      CRITICALITY ignore TYPE CRNC-CommunicationContextID
  PRESENCE mandatory }|
  { ID id-CauseLevel-RL-AdditionFailureTDD  CRITICALITY ignore TYPE CauseLevel-RL-AdditionFailureTDD
  PRESENCE mandatory }|
  { ID id-CriticalityDiagnostics           CRITICALITY ignore TYPE CriticalityDiagnostics
  PRESENCE optional },
  ...
}

RadioLinkAdditionFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CauseLevel-RL-AdditionFailureTDD ::= CHOICE {
  generalCause      GeneralCauseList-RL-AdditionFailureTDD,
  rLSpecificCause   RLSpecificCauseList-RL-AdditionFailureTDD,
  ...
}

GeneralCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
  cause              Cause,
  iE-Extensions     ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs } } OPTIONAL,
  ...
}

GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RLSpecificCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
  unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD,
  iE-Extensions                                             ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs } }
  OPTIONAL,
  ...
}

RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD} }

Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD NBAP-PROTOCOL-IES ::= {
  { ID id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD CRITICALITY ignore TYPE Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD
  PRESENCE mandatory }
}

Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD ::= SEQUENCE {
  rL-ID              RL-ID,

```

```

cause
iE-Extensions
OPTIONAL,
...
}

Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE FDD
--
-- *****

RadioLinkReconfigurationPrepareFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationPrepareFDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareFDD-Extensions}}
  ...
}

RadioLinkReconfigurationPrepareFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID          CRITICALITY reject TYPE NodeB-CommunicationContextID
    PRESENCE mandatory } |
  { ID id-UL-DPCH-Information-RL-ReconfPrepFDD  CRITICALITY reject TYPE UL-DPCH-Information-RL-
    ReconfPrepFDD PRESENCE optional } |
  { ID id-DL-DPCH-Information-RL-ReconfPrepFDD  CRITICALITY reject TYPE DL-DPCH-Information-RL-
    ReconfPrepFDD PRESENCE optional } |
  { ID id-FDD-DCHs-to-Modify                     CRITICALITY reject TYPE FDD-DCHs-to-Modify PRESENCE optional } |
  { ID id-DCHs-to-Add-FDD                       CRITICALITY reject TYPE DCH-FDD-Information PRESENCE optional } |
  { ID id-DCH-DeleteList-RL-ReconfPrepFDD      CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepFDD
    PRESENCE optional } |
  { ID id-DSCH-ModifyList-RL-ReconfPrepFDD     CRITICALITY reject TYPE DSCH-ModifyList-RL-ReconfPrepFDD
    PRESENCE optional } |
  { ID id-DSCHs-to-Add-FDD                     CRITICALITY reject TYPE DSCH-FDD-Information PRESENCE optional } |
  { ID id-DSCH-DeleteList-RL-ReconfPrepFDD     CRITICALITY reject TYPE DSCH-DeleteList-RL-ReconfPrepFDD
    PRESENCE optional } |
  { ID id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD CRITICALITY reject TYPE TFCI2-BearerSpecificInformation-
    RL-ReconfPrepFDD PRESENCE optional } |
  { ID id-RL-InformationList-RL-ReconfPrepFDD  CRITICALITY reject TYPE RL-InformationList-RL-
    ReconfPrepFDD PRESENCE optional } |
  { ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information
    PRESENCE optional },
  ...
}

RadioLinkReconfigurationPrepareFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DSCH-FDD-Common-Information          CRITICALITY ignore EXTENSION DSCH-FDD-Common-Information PRESENCE optional
  } |
  { ID id-SignallingBearerRequestIndicator    CRITICALITY reject EXTENSION SignallingBearerRequestIndicator PRESENCE optional } |
  { ID id-HSDSCH-Information-to-Modify        CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify PRESENCE optional } |

```

```

{ ID id-HSDSCH-FDD-Information-to-Add CRITICALITY reject EXTENSION HSDSCH-FDD-Information PRESENCE optional }
{ ID id-HSDSCH-FDD-Information-to-Delete CRITICALITY reject EXTENSION HSDSCH-DeleteList-RL-ReconfPrepFDD PRESENCE optional }
{ ID id-HSDSCH-RNTI CRITICALITY reject EXTENSION HSDSCH-RNTI PRESENCE optional }
{ ID id-HSPDSCH-RL-ID CRITICALITY reject EXTENSION RL-ID PRESENCE optional },
...
}

UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
  ul-ScramblingCode UL-ScramblingCode OPTIONAL,
  ul-SIR-Target UL-SIR OPTIONAL,
  minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength OPTIONAL,
  maxNrOfUL-DPDCHs MaxNrOfUL-DPDCHs OPTIONAL,
  -- This IE shall be present if minUL-ChannelisationCodeLength IE is set to 4
  ul-PunctureLimit PunctureLimit OPTIONAL,
  tFCS TFCS OPTIONAL,
  ul-DPCCH-SlotFormat UL-DPCCH-SlotFormat OPTIONAL,
  diversityMode DiversityMode OPTIONAL,
  sSDT-CellIDLength SSDT-CellID-Length OPTIONAL,
  s-FieldLength S-FieldLength OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
  ...
}

UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
  tFCS TFCS OPTIONAL,
  dl-DPCH-SlotFormat DL-DPCH-SlotFormat OPTIONAL,
  tFCI-SignallingMode TFCI-SignallingMode OPTIONAL,
  tFCI-Presence TFCI-Presence OPTIONAL,
  -- This IE shall be present if the DL DPCH Slot Format IE is set to any of the values from 12 to 16
  multiplexingPosition MultiplexingPosition OPTIONAL,
  pDSCH-CodeMapping PDSCH-CodeMapping OPTIONAL,
  pDSCH-RL-ID RL-ID OPTIONAL,
  limitedPowerIncrease LimitedPowerIncrease OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
  ...
}

DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepFDD

DCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
  dCH-ID DCH-ID,
  iE-Extensions ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
  ...
}

```

```

DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-ModifyList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-ModifyItemIE-RL-ReconfPrepFDD }}

DSCH-ModifyItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-DSCH-ModifyItem-RL-ReconfPrepFDD      CRITICALITY reject          TYPE      DSCH-ModifyItem-RL-ReconfPrepFDD      PRESENCE mandatory}
}

DSCH-ModifyItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    dl-TransportFormatSet  TransportFormatSet          OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority  FrameHandlingPriority      OPTIONAL,
    toAWS                  ToAWS                      OPTIONAL,
    toAWE                  ToAWE                      OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs} }    OPTIONAL,
    ...
}

DSCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID      id-bindingID                CRITICALITY ignore          EXTENSION  BindingID                PRESENCE  optional }|
    { ID      id-transportlayeraddress    CRITICALITY ignore          EXTENSION  TransportLayerAddress    PRESENCE  optional },
    ...
}

DSCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-DeleteItemIE-RL-ReconfPrepFDD }}

DSCH-DeleteItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-DSCH-DeleteItem-RL-ReconfPrepFDD      CRITICALITY reject          TYPE      DSCH-DeleteItem-RL-ReconfPrepFDD      PRESENCE mandatory}
}

DSCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs} }    OPTIONAL,
    ...
}

DSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD ::= CHOICE {
    addOrModify          AddOrModify-TFCI2-RL-ReconfPrepFDD,
    delete              NULL
}

AddOrModify-TFCI2-RL-ReconfPrepFDD ::= SEQUENCE {
    toAWS                ToAWS,
    toAWE                ToAWE,
    iE-Extensions        ProtocolExtensionContainer { { AddOrModify-TFCI2-RL-ReconfPrepFDD-ExtIEs} }    OPTIONAL,
}

```

```

}
...
}
AddOrModify-TFCI2-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TFCI2BearerRequestIndicator CRITICALITY reject EXTENSION TFCI2BearerRequestIndicator PRESENCE optional },
  ...
}
RL-InformationList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfPrepFDD }}
RL-InformationItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-RL-ReconfPrepFDD CRITICALITY reject TYPE RL-InformationItem-RL-
ReconfPrepFDD PRESENCE mandatory}
}
RL-InformationItem-RL-ReconfPrepFDD ::= SEQUENCE {
  rL-ID RL-ID,
  dl-CodeInformation FDD-DL-CodeInformation OPTIONAL,
  maxDL-Power DL-Power OPTIONAL,
  minDL-Power DL-Power OPTIONAL,
  sSDT-Indication SSdT-Indication OPTIONAL,
  sSDT-Cell-Identity SSdT-Cell-Identity OPTIONAL,
  -- The IE shall be present if the SSdT Indication IE is set to "SSdT Active in the UE"
  transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
  -- This IE shall be present if Diversity Mode IE is present in UL DPCH Information IE and it is not set to "none"
  iE-Extensions ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
  ...
}
RL-InformationItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-SSdT-CellIDforEDSCHPC CRITICALITY ignore EXTENSION SSdT-Cell-Identity PRESENCE conditional }|
  -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Common Information IE.
  { ID id-DLReferencePower CRITICALITY ignore EXTENSION DL-Power PRESENCE optional }|
  { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional }|
  { ID id-DL-DPCH-TimingAdjustment CRITICALITY reject EXTENSION DL-DPCH-TimingAdjustment PRESENCE optional },
  ...
}
HSDSCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-DeleteItem-RL-ReconfPrepFDD
HSDSCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
  hsDSCH-MACdFlow-ID HSDSCH-MACdFlow-ID,
  iE-Extensions ProtocolExtensionContainer { { HSDSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
  ...
}
HSDSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE TDD

```

```
--
-- *****
RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationPrepareTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}}          OPTIONAL,
    ...
}

RadioLinkReconfigurationPrepareTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-NodeB-CommunicationContextID          CRITICALITY    reject          TYPE          NodeB-CommunicationContextID
      PRESENCE  mandatory } |
    { ID      id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE          UL-CCTrCH-
    InformationAddList-RL-ReconfPrepTDD          PRESENCE  optional } |
    { ID      id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE          UL-CCTrCH-
    InformationModifyList-RL-ReconfPrepTDD          PRESENCE  optional } |
    { ID      id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE          UL-CCTrCH-
    InformationDeleteList-RL-ReconfPrepTDD          PRESENCE  optional } |
    { ID      id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE          DL-CCTrCH-
    InformationAddList-RL-ReconfPrepTDD          PRESENCE  optional } |
    { ID      id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE          DL-CCTrCH-
    InformationModifyList-RL-ReconfPrepTDD          PRESENCE  optional } |
    { ID      id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE          DL-CCTrCH-
    InformationDeleteList-RL-ReconfPrepTDD          PRESENCE  optional } |
    { ID      id-TDD-DCHs-to-Modify          CRITICALITY    reject          TYPE          TDD-DCHs-to-Modify          PRESENCE  optional
    } |
    { ID      id-DCHs-to-Add-TDD          CRITICALITY    reject          TYPE          DCH-TDD-Information          PRESENCE  optional
    } |
    { ID      id-DCH-DeleteList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE          DCH-DeleteList-RL-ReconfPrepTDD
      PRESENCE  optional } |
    { ID      id-DSCH-Information-ModifyList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE          DSCH-Information-ModifyList-RL-
    ReconfPrepTDD          PRESENCE  optional } |
    { ID      id-DSCHs-to-Add-TDD          CRITICALITY    reject          TYPE          DSCH-TDD-Information          PRESENCE  optional } |
    { ID      id-DSCH-Information-DeleteList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE          DSCH-Information-DeleteList-RL-
    ReconfPrepTDD          PRESENCE  optional } |
    { ID      id-USCH-Information-ModifyList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE          USCH-Information-ModifyList-RL-
    ReconfPrepTDD          PRESENCE  optional } |
    { ID      id-USCH-Information-Add          CRITICALITY    reject          TYPE          USCH-Information          PRESENCE  optional } |
    { ID      id-USCH-Information-DeleteList-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE          USCH-Information-DeleteList-RL-
    ReconfPrepTDD          PRESENCE  optional } |
    { ID      id-RL-Information-RL-ReconfPrepTDD          CRITICALITY    reject          TYPE          RL-Information-RL-ReconfPrepTDD
      PRESENCE  optional },
    ...
}

RadioLinkReconfigurationPrepareTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID      id-SignallingBearerRequestIndicator          CRITICALITY    reject          EXTENSION    SignallingBearerRequestIndicator          PRESENCE  optional } |
    { ID      id-HSDSCH-Information-to-Modify          CRITICALITY    reject          EXTENSION    HSDSCH-Information-to-Modify          PRESENCE  optional } |
    { ID      id-HSDSCH-TDD-Information-to-Add          CRITICALITY    reject          EXTENSION    HSDSCH-TDD-Information          PRESENCE  optional } |
    { ID      id-HSDSCH-TDD-Information-to-Delete          CRITICALITY    reject          EXTENSION    HSDSCH-DeleteList-RL-ReconfPrepTDD          PRESENCE  optional } |
    { ID      id-HSDSCH-RNTI          CRITICALITY    reject          EXTENSION    HSDSCH-RNTI          PRESENCE  optional } |
    { ID      id-HSPDSCH-RL-ID          CRITICALITY    reject          EXTENSION    RL-ID          PRESENCE  optional },
    ...
}

```

```

}

UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    tFCS                     TFCS,
    tFCI-Coding              TFCI-Coding,
    punctureLimit            PunctureLimit,
    ul-DPCH-InformationList  UL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-DPCH-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional } | -- Applicable to F 3.84Mcps TDD only
    { ID id-UL-SIRTarget CRITICALITY reject EXTENSION UL-SIR PRESENCE optional },
    -- This IE shall be mandatory for 1.28Mcps TDD, and not applicable for 3.84Mcps TDD.
    ...
}

UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationAddItem-RL-ReconfPrepTDD PRESENCE
    mandatory }
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    uL-Timeslot-Information   UL-Timeslot-Information,
    iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD } }

UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
    PRESENCE mandatory } | -- Applicable to F 1.28Mcps TDD only
}

UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
}

```

```

    uL-Timeslot-InformationLCR          UL-TimeslotLCR-Information,
    iE-Extensions                       ProtocolExtensionContainer { { UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS               TFCS
                                     OPTIONAL,
    tFCI-Coding        TFCI-Coding
                                     OPTIONAL,
    punctureLimit      PunctureLimit
                                     OPTIONAL,
    ul-DPCH-InformationAddList  UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD
                                     OPTIONAL,
    ul-DPCH-InformationModifyList  UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD
                                     OPTIONAL,
    ul-DPCH-InformationDeleteList  UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD
                                     OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-InformationModify-AddList  CRITICALITY reject      EXTENSION      UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
    PRESENCE optional } | -- Applicable to For 1.28Mcps TDD only
    { ID id-UL-SIRTarget  CRITICALITY reject      EXTENSION      UL-SIR      PRESENCE optional
    -- This IE shall be applicable to For 1.28Mcps TDD only.
    ...
}

UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD  CRITICALITY reject      TYPE UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
    PRESENCE mandatory }
}

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    uL-Timeslot-Information  UL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { { UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationModify-AddListIEs-RL-
ReconfPrepTDD }}

UL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE UL-DPCH-LCR-InformationModify-AddItem-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  uL-Timeslot-InformationLCR  UL-TimeslotLCR-Information,
  iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD }}

UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE UL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod          OPTIONAL,
  repetitionLength          RepetitionLength          OPTIONAL,
  tdd-DPCHOffset            TDD-DPCHOffset            OPTIONAL,
  uL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD      UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD      OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD  CRITICALITY reject          EXTENSION  UL-TimeslotLCR-InformationModify-ModifyList-RL-
ReconfPrepTDD          PRESENCE optional },    -- Applicable to For 1.28Mcps TDD only
  ...
}

UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD    -- Applicable to For 3.84Mcps TDD only

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  timeSlot                  TimeSlot,
  midambleShiftAndBurstType  MidambleShiftAndBurstType          OPTIONAL,
  tFCI-Presence              TFCI-Presence          OPTIONAL,
  uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD      UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD      OPTIONAL,
}

```

```

    iE-Extensions
    OPTIONAL,
    ...
}

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID
    DPCH-ID,
    tdd-ChannelisationCode
    TDD-ChannelisationCode OPTIONAL,
    iE-Extensions
    ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeslotLCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfPrepTDD -- Applicable to For 1.28Mcps TDD only
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR
    TimeSlotLCR,
    midambleShiftLCR
    MidambleShiftLCR OPTIONAL,
    tFCI-Presence
    TFCI-Presence OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLDCR
    UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLDCR OPTIONAL,
    iE-Extensions
    ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLDCR ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLDCR ::= SEQUENCE {
    dPCH-ID
    DPCH-ID,
    tdd-ChannelisationCodeLCR
    TDD-ChannelisationCodeLCR OPTIONAL,
    iE-Extensions
    ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLDCR-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLDCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD }}
```

```
UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationModify-DeleteListIE-RL-
  ReconfPrepTDD PRESENCE mandatory }
}
```

```
UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD
```

```
UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dPCH-ID DPCH-ID,
  iE-Extensions ProtocolExtensionContainer { { UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}
```

```
UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD
```

```
UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCtTrCH-ID CCTrCH-ID,
  iE-Extensions ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}
```

```
UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD
```

```
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCtTrCH-ID CCTrCH-ID,
  tFCS TFCS,
  tFCI-Coding TFCI-Coding,
  punctureLimit PunctureLimit,
  cCtTrCH-TPCList CCTrCH-TPCAddList-RL-ReconfPrepTDD OPTIONAL,
  dl-DPCH-InformationList DL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}
```

```
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD CRITICALITY reject EXTENSION DL-DPCH-LCR-
  InformationAddList-RL-ReconfPrepTDD PRESENCE optional } | -- Applicable to Fes 1.28Mcps TDD only
  { ID id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional },
```

```

}
...
}
CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD -- Applicable to Fes 3.84Mcps
TDD only

CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID                CCTrCH-ID,
    iE-Extensions              ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationAddItem-RL-ReconfPrepTDD PRESENCE
mandatory }
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    dl-Timeslot-Information    DL-Timeslot-Information,
    iE-Extensions              ProtocolExtensionContainer { { DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD }}

DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
PRESENCE mandatory } -- Applicable to Fes 1.28Mcps TDD only
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    dl-Timeslot-InformationLCR DL-TimeslotLCR-Information,
    iE-Extensions              ProtocolExtensionContainer { { DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS               TFCS                                OPTIONAL,
    tFCI-Coding        TFCI-Coding                        OPTIONAL,
    punctureLimit      PunctureLimit                     OPTIONAL,
    cCTrCH-TPCList     CCTrCH-TPCModifyList-RL-ReconfPrepTDD  OPTIONAL,
    dl-DPCH-InformationAddList DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD
    dl-DPCH-InformationModifyList DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD
    dl-DPCH-InformationDeleteList DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD
    iE-Extensions     ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
    { ID id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject EXTENSION DL-DPCH-LCR-InformationModify-
    AddList-RL-ReconfPrepTDD PRESENCE optional }
}

CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    iE-Extensions     ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }} --
Applicable to For 3.84Mcps TDD only

DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
    PRESENCE mandatory } -- For 1.28Mcps TDD only
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dl-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-LCR-InformationModify-AddListIEs-RL-
ReconfPrepTDD }}

DL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-LCR-InformationModify-AddItem-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  dL-Timeslot-InformationLCR DL-TimeslotLCR-Information,
  iE-Extensions             ProtocolExtensionContainer { { DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod          OPTIONAL,
  repetitionLength          RepetitionLength          OPTIONAL,
  tdd-DPCHOffset            TDD-DPCHOffset            OPTIONAL,
  dL-Timeslot-InformationAddModify-ModifyList-RL-ReconfPrepTDD DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD          OPTIONAL,
  iE-Extensions             ProtocolExtensionContainer { { DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD  CRITICALITY reject          EXTENSION          DL-Timeslot-
LCR-InformationModify-ModifyList-RL-ReconfPrepTDD          PRESENCE optional },
  ...
}

DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD

```

```

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
    tFCI-Presence           TFCI-Presence OPTIONAL,
    dL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCode TDD-ChannelisationCode OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR            TimeSlotLCR,
    midambleShiftLCR       MidambleShiftLCR OPTIONAL,
    tFCI-Presence           TFCI-Presence OPTIONAL,
    dL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

```

```

DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD    CRITICALITY reject          TYPE DL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
    ...
}

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID              CCTrCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
    ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD

DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }    OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-ModifyItem-RL-ReconfPrepTDD

```



```

DSCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    cTrCH-ID                CTrCH-ID                OPTIONAL,
    transportFormatSet      TransportFormatSet      OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority   FrameHandlingPriority OPTIONAL,
    toAWS                   ToAWS                   OPTIONAL,
    toAWE                   ToAWE                   OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    iE-Extensions           ProtocolExtensionContainer { { DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID          CRITICALITY ignore     EXTENSION BindingID          PRESENCE          optional }|
    { ID id-transportlayeraddress CRITICALITY ignore     EXTENSION TransportLayerAddress PRESENCE          optional },
    ...
}

```

```

DSCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-DeleteItem-RL-ReconfPrepTDD

```

```

DSCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    iE-Extensions           ProtocolExtensionContainer { { DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

USCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-ModifyItem-RL-ReconfPrepTDD

```

```

USCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    transportFormatSet      TransportFormatSet      OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    cTrCH-ID                CTrCH-ID                OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    iE-Extensions           ProtocolExtensionContainer { { USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID          CRITICALITY ignore     EXTENSION BindingID          PRESENCE          optional }|
    { ID id-transportlayeraddress CRITICALITY ignore     EXTENSION TransportLayerAddress PRESENCE          optional },
    ...
}

```

```

USCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-DeleteItem-RL-ReconfPrepTDD

```

```

USCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID                USCH-ID,

```

```

    iE-Extensions          ProtocolExtensionContainer { { USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-ReconfPrepTDD ::= SEQUENCE {
    rL-ID                  RL-ID,
    maxDL-Power            DL-Power          OPTIONAL,
    minDL-Power            DL-Power          OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { RL-Information-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

RL-Information-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-InitDL-Power    CRITICALITY ignore    EXTENSION DL-Power    PRESENCE optional } |
    { ID id-RL-Specific-DCH-Info    CRITICALITY ignore    EXTENSION    RL-Specific-DCH-Info    PRESENCE    optional },
    ...
}

HSDSCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-DeleteItem-RL-ReconfPrepTDD

HSDSCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    hsDSCH-MACdFlow-ID    HSDSCH-MACdFlow-ID,
    iE-Extensions          ProtocolExtensionContainer { { HSDSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION READY
--
-- *****

RadioLinkReconfigurationReady ::= SEQUENCE {
    protocolIEs            ProtocolIE-Container    {{RadioLinkReconfigurationReady-IEs}},
    protocolExtensions     ProtocolExtensionContainer {{RadioLinkReconfigurationReady-Extensions}} OPTIONAL,
    ...
}

RadioLinkReconfigurationReady-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID    CRITICALITY    ignore    TYPE    CRNC-CommunicationContextID
      PRESENCE    mandatory    } |
    { ID    id-RL-InformationResponseList-RL-ReconfReady    CRITICALITY    ignore    TYPE    RL-InformationResponseList-RL-
ReconfReady    PRESENCE    optional    } |

```

```

    { ID id-CriticalityDiagnostics          CRITICALITY ignore     TYPE          CriticalityDiagnostics
      PRESENCE optional },
    ...
}

RadioLinkReconfigurationReady-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TargetCommunicationControlPortID  CRITICALITY ignore  EXTENSION  CommunicationControlPortID          PRESENCE optional },
  ...
}

RL-InformationResponseList-RL-ReconfReady ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-RL-
ReconfReady}}

RL-InformationResponseItemIE-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponseItem-RL-ReconfReady          CRITICALITY ignore          TYPE RL-InformationResponseItem-
RL-ReconfReady          PRESENCE mandatory}
}

RL-InformationResponseItem-RL-ReconfReady ::= SEQUENCE {
  rL-ID                RL-ID,
  dCH-InformationResponseList-RL-ReconfReady  DCH-InformationResponseList-RL-ReconfReady OPTIONAL,
  dSCH-InformationResponseList-RL-ReconfReady  DSCH-InformationResponseList-RL-ReconfReady OPTIONAL,
  uSCH-InformationResponseList-RL-ReconfReady  USCH-InformationResponseList-RL-ReconfReady OPTIONAL, -- TDD only
  tFCI2-BearerInformationResponse              TFCI2-BearerInformationResponse OPTIONAL, --FDD only
  iE-Extensions                                ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfReady-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationResponseItem-RL-ReconfReady-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-PowerBalancing-UpdatedIndicator  CRITICALITY ignore     EXTENSION  DL-PowerBalancing-UpdatedIndicator  PRESENCE optional}|
  { ID id-HSDSCH-FDD-Information-Response     CRITICALITY ignore     EXTENSION  HSDSCH-FDD-Information-Response     PRESENCE optional }|
  { ID id-HSDSCH-TDD-Information-Response     CRITICALITY ignore     EXTENSION  HSDSCH-TDD-Information-Response     PRESENCE optional },
  ...
}

DCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfReady }}

DCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse  CRITICALITY ignore  TYPE DCH-InformationResponse  PRESENCE mandatory }
}

DSCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-ReconfReady }}

DSCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationResponse  CRITICALITY ignore  TYPE DSCH-InformationResponse  PRESENCE mandatory }
}

USCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-ReconfReady }}

USCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
  { ID id-USCH-InformationResponse  CRITICALITY ignore  TYPE USCH-InformationResponse  PRESENCE mandatory }
}

```

```

-- *****
--
-- RADIO LINK RECONFIGURATION FAILURE
--
-- *****

RadioLinkReconfigurationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationFailure-Extensions}}    OPTIONAL,
    ...
}

RadioLinkReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID      CRITICALITY   ignore      TYPE          CRNC-CommunicationContextID
      PRESENCE mandatory } |
    { ID      id-CauseLevel-RL-ReconfFailure      CRITICALITY   ignore      TYPE          CauseLevel-RL-ReconfFailure      PRESENCE mandatory } |
    { ID      id-CriticalityDiagnostics          CRITICALITY   ignore      TYPE          CriticalityDiagnostics
      PRESENCE optional   },
    ...
}

RadioLinkReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CauseLevel-RL-ReconfFailure ::= CHOICE {
    generalCause          GeneralCauseList-RL-ReconfFailure,
    rLSpecificCause       RLSpecificCauseList-RL-ReconfFailure,
    ...
}

GeneralCauseList-RL-ReconfFailure ::= SEQUENCE {
    cause                 Cause,
    iE-Extensions         ProtocolExtensionContainer { { GeneralCauseItem-RL-ReconfFailure-ExtIEs} }    OPTIONAL,
    ...
}

GeneralCauseItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-ReconfFailure ::= SEQUENCE {
    rL-ReconfigurationFailureList-RL-ReconfFailure      RL-ReconfigurationFailureList-RL-ReconfFailure      OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { RLSpecificCauseItem-RL-ReconfFailure-ExtIEs} }    OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-ReconfigurationFailureList-RL-ReconfFailure ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-
ReconfigurationFailureItemIE-RL-ReconfFailure}}

```

```

RL-ReconfigurationFailureItemIE-RL-ReconfFailure NBAP-PROTOCOL-IES ::= {
  { ID      id-RL-ReconfigurationFailureItem-RL-ReconfFailure      CRITICALITY      ignore      TYPE      RL-
ReconfigurationFailureItem-RL-ReconfFailure      PRESENCE      mandatory}
}

RL-ReconfigurationFailureItem-RL-ReconfFailure ::= SEQUENCE {
  rL-ID          RL-ID,
  cause          Cause,
  iE-Extensions ProtocolExtensionContainer { { RL-ReconfigurationFailureItem-RL-ReconfFailure-ExtIEs} }
  OPTIONAL,
  ...
}

RL-ReconfigurationFailureItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION COMMIT
--
-- *****

RadioLinkReconfigurationCommit ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container      {{RadioLinkReconfigurationCommit-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkReconfigurationCommit-Extensions}}      OPTIONAL,
  ...
}

RadioLinkReconfigurationCommit-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-NodeB-CommunicationContextID      CRITICALITY      ignore      TYPE      NodeB-CommunicationContextID      PRESENCE mandatory } |
  { ID      id-CFN      CRITICALITY      ignore      TYPE      CFN      PRESENCE      PRESENCE
mandatory } |
  { ID      id-Active-Pattern-Sequence-Information      CRITICALITY      ignore      TYPE      Active-Pattern-Sequence-Information      PRESENCE optional },
  ...
}

RadioLinkReconfigurationCommit-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION CANCEL
--
-- *****

RadioLinkReconfigurationCancel ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container      {{RadioLinkReconfigurationCancel-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkReconfigurationCancel-Extensions}}      OPTIONAL,
  ...
}

```

```

RadioLinkReconfigurationCancel-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID CRITICALITY ignore TYPE NodeB-CommunicationContextID PRESENCE mandatory },
  ...
}

RadioLinkReconfigurationCancel-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST FDD
--
-- *****

RadioLinkReconfigurationRequestFDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkReconfigurationRequestFDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkReconfigurationRequestFDD-Extensions}} OPTIONAL,
  ...
}

RadioLinkReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID CRITICALITY reject TYPE NodeB-CommunicationContextID PRESENCE mandatory } |
  { ID id-UL-DPCH-Information-RL-ReconfRqstFDD CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfRqstFDD PRESENCE optional } |
  { ID id-DL-DPCH-Information-RL-ReconfRqstFDD CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfRqstFDD PRESENCE optional } |
  { ID id-FDD-DCHs-to-Modify CRITICALITY reject TYPE FDD-DCHs-to-Modify PRESENCE optional } |
  { ID id-DCHs-to-Add-FDD CRITICALITY reject TYPE DCH-FDD-Information PRESENCE optional } |
  { ID id-DCH-DeleteList-RL-ReconfRqstFDD CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstFDD PRESENCE optional } |
  { ID id-RL-InformationList-RL-ReconfRqstFDD CRITICALITY reject TYPE RL-InformationList-RL-ReconfRqstFDD PRESENCE optional } |
  { ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE optional },
  ...
}

RadioLinkReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-SignallingBearerRequestIndicator CRITICALITY reject EXTENSION SignallingBearerRequestIndicator PRESENCE optional },
  ...
}

UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
  ul-TFCS TFCS OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
    dl-TFCS                TFCS                OPTIONAL,
    tFCI-SignallingMode    TFCI-SignallingMode    OPTIONAL,
    limitedPowerIncrease    LimitedPowerIncrease    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstFDD

DCH-DeleteItem-RL-ReconfRqstFDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfRqstFDD}}

RL-InformationItemIE-RL-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-ReconfRqstFDD          CRITICALITY reject          TYPE          RL-InformationItem-RL-
ReconfRqstFDD          PRESENCE mandatory}
}

RL-InformationItem-RL-ReconfRqstFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    maxDL-Power          DL-Power          OPTIONAL,
    minDL-Power          DL-Power          OPTIONAL,
    dl-CodeInformation    FDD-DL-CodeInformation    OPTIONAL,
    -- The IE shall be present if the Transmission Gap Pattern Sequence Information IE is included and the indicated Downlink Compressed Mode method for
at least one of the included Transmission Gap Pattern Sequence is set to "SF/2".
    iE-Extensions          ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

RL-InformationItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DLReferencePower          CRITICALITY ignore          EXTENSION DL-Power          PRESENCE optional }|
    { ID id-RL-Specific-DCH-Info          CRITICALITY ignore          EXTENSION RL-Specific-DCH-Info          PRESENCE optional },
    ...
}
-- *****

```

```

--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- *****

RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{RadioLinkReconfigurationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{RadioLinkReconfigurationRequestTDD-Extensions}}      OPTIONAL,
    ...
}

RadioLinkReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY reject          TYPE NodeB-
CommunicationContextID          PRESENCE mandatory } |
    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE UL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD          PRESENCE optional } |
    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE UL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD          PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE DL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD          PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE DL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD          PRESENCE optional } |
    { ID id-TDD-DCHs-to-Modify          CRITICALITY reject          TYPE TDD-DCHs-to-Modify          PRESENCE optional } |
    { ID id-DCHs-to-Add-TDD          CRITICALITY reject          TYPE DCH-TDD-Information          PRESENCE optional } |
    { ID id-DCH-DeleteList-RL-ReconfRqstTDD          CRITICALITY reject          TYPE DCH-DeleteList-RL-
ReconfRqstTDD          PRESENCE optional } |
    { ID id-RL-Information-RL-ReconfRqstTDD          CRITICALITY ignore          TYPE RL-Information-RL-ReconfRqstTDD          PRESENCE optional },
    ...
}

RadioLinkReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SignallingBearerRequestIndicator          CRITICALITY reject          EXTENSION SignallingBearerRequestIndicator          PRESENCE optional },
    ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD          CRITICALITY notify          TYPE UL-CCTrCH-
InformationModifyItem-RL-ReconfRqstTDD          PRESENCE mandatory }
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCtRch-ID          CCTrCH-ID,
    tFCS          OPTIONAL,
    punctureLimit          PunctureLimit          OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

```



```

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD      CRITICALITY    notify                                TYPE    UL-CCTrCH-
InformationDeleteItem-RL-ReconfRqstTDD      PRESENCE      mandatory}
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD      CRITICALITY    notify                                TYPE    DL-CCTrCH-
InformationModifyItem-RL-ReconfRqstTDD      PRESENCE      mandatory}
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    tFCS                     TFCS                OPTIONAL,
    punctureLimit            PunctureLimit    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD      CRITICALITY    notify                                TYPE    DL-CCTrCH-
InformationDeleteItem-RL-ReconfRqstTDD      PRESENCE      mandatory}
}

```

```

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    iE-Extensions     ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD

DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    dCH-ID          DCH-ID,
    iE-Extensions  ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs } }      OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-ReconfRqstTDD ::= SEQUENCE {
    rL-ID          RL-ID,
    maxDL-Power   DL-Power      OPTIONAL,
    minDL-Power   DL-Power      OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstTDD-ExtIEs } }      OPTIONAL,
    ...
}

RL-InformationItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-Specific-DCH-Info          CRITICALITY ignore      EXTENSION  RL-Specific-DCH-Info          PRESENCE  optional },
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION RESPONSE
--
-- *****

RadioLinkReconfigurationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{RadioLinkReconfigurationResponse-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{RadioLinkReconfigurationResponse-Extensions}}      OPTIONAL,
    ...
}

RadioLinkReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore      TYPE      CRNC-CommunicationContextID          PRESENCE
    mandatory } |
    { ID id-RL-InformationResponseList-RL-ReconfRsp  CRITICALITY ignore      TYPE      RL-InformationResponseList-RL-ReconfRsp          PRESENCE
    optional } |
}

```

```

    { ID id-CriticalityDiagnostics          CRITICALITY ignore      TYPE      CriticalityDiagnostics          PRESENCE
      optional    },
    ...
}

RadioLinkReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TargetCommunicationControlPortID  CRITICALITY ignore  EXTENSION  CommunicationControlPortID          PRESENCE optional },
  ...
}

RL-InformationResponseList-RL-ReconfRsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationResponseItemIE-RL-
ReconfRsp}}

RL-InformationResponseItemIE-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponseItem-RL-ReconfRsp          CRITICALITY ignore      TYPE          RL-InformationResponseItem-RL-
ReconfRsp          PRESENCE mandatory}
}

RL-InformationResponseItem-RL-ReconfRsp ::= SEQUENCE {
  rL-ID                      RL-ID,
  dCH-InformationResponseList-RL-ReconfRsp          DCH-InformationResponseList-RL-ReconfRsp          OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfRsp-ExtIEs } }          OPTIONAL,
  ...
}

RL-InformationResponseItem-RL-ReconfRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-PowerBalancing-UpdatedIndicator  CRITICALITY ignore      EXTENSION      DL-PowerBalancing-UpdatedIndicator          PRESENCE optional},
  ...
}

DCH-InformationResponseList-RL-ReconfRsp ::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfRsp }}

DCH-InformationResponseListIEs-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse  CRITICALITY ignore      TYPE DCH-InformationResponse          PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK DELETION REQUEST
--
-- *****

RadioLinkDeletionRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{RadioLinkDeletionRequest-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{RadioLinkDeletionRequest-Extensions}}          OPTIONAL,
  ...
}

RadioLinkDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID          CRITICALITY reject      TYPE          NodeB-CommunicationContextID
    PRESENCE mandatory    } |
  { ID id-CRNC-CommunicationContextID          CRITICALITY reject      TYPE          CRNC-CommunicationContextID
    PRESENCE mandatory    } |

```

```

    { ID      id-RL-informationList-RL-DeletionRqst
      DeletionRqst      PRESENCE      mandatory      } ,
    ...
  }

RadioLinkDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-informationList-RL-DeletionRqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-informationItemIE-RL-DeletionRqst}}

RL-informationItemIE-RL-DeletionRqst NBAP-PROTOCOL-IES ::= {
  { ID      id-RL-informationItem-RL-DeletionRqst      CRITICALITY      notify      TYPE      RL-informationItem-RL-
  DeletionRqst      PRESENCE      mandatory}
}

RL-informationItem-RL-DeletionRqst ::= SEQUENCE {
  rL-ID      RL-ID,
  iE-Extensions      ProtocolExtensionContainer { { RL-informationItem-RL-DeletionRqst-ExtIEs} }      OPTIONAL,
  ...
}

RL-informationItem-RL-DeletionRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK DELETION RESPONSE
--
-- *****

RadioLinkDeletionResponse ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container      {{RadioLinkDeletionResponse-IEs}},
  protocolExtensions      ProtocolExtensionContainer      {{RadioLinkDeletionResponse-Extensions}}      OPTIONAL,
  ...
}

RadioLinkDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CRNC-CommunicationContextID      CRITICALITY      ignore      TYPE      CRNC-CommunicationContextID      PRESENCE mandatory
  }|
  { ID      id-CriticalityDiagnostics      CRITICALITY      ignore      TYPE      CriticalityDiagnostics      PRESENCE optional },
  ...
}

RadioLinkDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- DL POWER CONTROL REQUEST FDD

```

```

--
-- *****
DL-PowerControlRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DL-PowerControlRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DL-PowerControlRequest-Extensions}}
    ...
}

DL-PowerControlRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY ignore          TYPE          NodeB-CommunicationContextID          PRESENCE mandatory } |
    { ID id-PowerAdjustmentType                   CRITICALITY ignore          TYPE          PowerAdjustmentType                   PRESENCE mandatory } |
    { ID id-DLReferencePower                      CRITICALITY ignore          TYPE          DL-Power                               PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common'
    { ID id-InnerLoopDLPCStatus                   CRITICALITY ignore          TYPE          InnerLoopDLPCStatus                   PRESENCE optional } |
    { ID id-DLReferencePowerList-DL-PC-Rqst       CRITICALITY ignore          TYPE          DL-ReferencePowerInformationList-DL-PC-Rqst PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Individual'
    { ID id-MaxAdjustmentStep                     CRITICALITY ignore          TYPE          MaxAdjustmentStep                     PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
    { ID id-AdjustmentPeriod                      CRITICALITY ignore          TYPE          AdjustmentPeriod                      PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
    { ID id-AdjustmentRatio                       CRITICALITY ignore          TYPE          ScaledAdjustmentRatio                 PRESENCE conditional } ,
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
    ...
}

DL-PowerControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-ReferencePowerInformationList-DL-PC-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{DL-ReferencePowerInformationItemIE-DL-PC-Rqst }}

DL-ReferencePowerInformationItemIE-DL-PC-Rqst NBAP-PROTOCOL-IES ::= {
    { ID id-DL-ReferencePowerInformationItem-DL-PC-Rqst          CRITICALITY          ignore          TYPE          DL-ReferencePowerInformationItem-DL-PC-Rqst
    PRESENCE          mandatory
    }
}

DL-ReferencePowerInformationItem-DL-PC-Rqst ::= SEQUENCE {
    rL-ID          RL-ID,
    dl-ReferencePower          DL-Power,
    iE-Extensions          ProtocolExtensionContainer { { DL-ReferencePowerInformationItem-DL-PC-Rqst-ExtIEs } }
    ...
}

DL-ReferencePowerInformationItem-DL-PC-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DL POWER TIMESLOT CONTROL REQUEST TDD

```

```

--
-- *****
DL-PowerTimeslotControlRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DL-PowerTimeslotControlRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DL-PowerTimeslotControlRequest-Extensions}}
    ...
}

DL-PowerTimeslotControlRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY ignore          TYPE      NodeB-CommunicationContextID          PRESENCE mandatory
    } |
    { ID id-TimeslotISCPInfo                      CRITICALITY ignore          TYPE      DL-TimeslotISCPInfo          PRESENCE optional }, -- Mandatory for 3.84Mcps TDD
    only, Not Applicable to 1.28Mcps TDD
    ...
}

DL-PowerTimeslotControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD          CRITICALITY ignore          EXTENSION TimeslotISCPInfoList-LCR-DL-PC-RqstTDD          PRESENCE
    optional } | mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    { ID id-PrimCCPCH-RSCP-DL-PC-RqstTDD          CRITICALITY ignore          EXTENSION PrimaryCCPCH-RSCP          PRESENCE optional },
    ...
}

TimeslotISCPInfoList-LCR-DL-PC-RqstTDD ::= SEQUENCE {
    dl-TimeslotISCP-LCR-Info      DL-TimeslotISCPInfoLCR, mandatory for 1.28Mcps TDD only
    iE-Extensions                ProtocolExtensionContainer { {TimeslotISCPInfoItem-LCR-DL-PC-RqstTDD-ExtIEs} }
    ...
}

TimeslotISCPInfoItem-LCR-DL-PC-RqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DEDICATED MEASUREMENT INITIATION REQUEST
--
-- *****
DedicatedMeasurementInitiationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementInitiationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DedicatedMeasurementInitiationRequest-Extensions}}
    ...
}

DedicatedMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-NodeB-CommunicationContextID          CRITICALITY      reject          TYPE      NodeB-CommunicationContextID          PRESENCE
    mandatory } |
    { ID      id-MeasurementID                        CRITICALITY      reject          TYPE      MeasurementID                        PRESENCE
    mandatory } |

```

```

    { ID id-DedicatedMeasurementObjectType-DM-Rqst      CRITICALITY reject TYPE DedicatedMeasurementObjectType-DM-Rqst PRESENCE
      mandatory } |
    -- This IE represents both the Dedicated Measurement Object Type IE and the choice based on the Dedicated Measurement Object Type
    -- as described in the tabular message format in subclause 9.1.
    { ID id-DedicatedMeasurementType                    CRITICALITY reject TYPE DedicatedMeasurementType PRESENCE
      mandatory } |
    { ID id-MeasurementFilterCoefficient                CRITICALITY reject TYPE MeasurementFilterCoefficient PRESENCE
      optional } |
    { ID id-ReportCharacteristics                       CRITICALITY reject TYPE ReportCharacteristics PRESENCE
      mandatory } |
    { ID id-CFNReportingIndicator                      CRITICALITY reject TYPE FNReportingIndicator PRESENCE
      mandatory } |
    { ID id-CFN                                         CRITICALITY reject TYPE CFN PRESENCE
      optional } ,
    ...
  }

DedicatedMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DedicatedMeasurementObjectType-DM-Rqst ::= CHOICE {
  rL          RL-DM-Rqst,
  rLS         RL-Set-DM-Rqst, -- for FDD only
  all-RL      AllRL-DM-Rqst,
  all-RLS     AllRL-Set-DM-Rqst, -- for FDD only
  ...
}

RL-DM-Rqst ::= SEQUENCE {
  rL-InformationList      RL-InformationList-DM-Rqst,
  iE-Extensions           ProtocolExtensionContainer { { RLItem-DM-Rqst-ExtIEs } } OPTIONAL,
  ...
}

RLItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationList-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rqst }}

RL-InformationItemIE-DM-Rqst NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-DM-Rqst CRITICALITY reject TYPE RL-InformationItem-DM-Rqst PRESENCE mandatory }
}

RL-InformationItem-DM-Rqst ::= SEQUENCE {
  rL-ID          RL-ID,
  dPCH-ID        DPCH-ID OPTIONAL, -- for TDD only
  iE-Extensions  ProtocolExtensionContainer { { RL-InformationItem-DM-Rqst-ExtIEs } } OPTIONAL,
  ...
}

RL-InformationItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

    { ID id-PUSCH-Info-DM-Rqst      CRITICALITY reject      EXTENSION  PUSCH-Info-DM-Rqst      PRESENCE optional},
    -- TDD only
    ...
}

PUSCH-Info-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF PUSCH-ID

RL-Set-DM-Rqst ::= SEQUENCE {
    rL-Set-InformationList-DM-Rqst      RL-Set-InformationList-DM-Rqst,
    iE-Extensions                       ProtocolExtensionContainer { { RL-SetItem-DM-Rqst-ExtIEs } }      OPTIONAL,
    ...
}

RL-SetItem-DM-Rqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-DM-Rqst      ::= SEQUENCE (SIZE(1..maxNrOfRLSets)) OF RL-Set-InformationItem-DM-Rqst

RL-Set-InformationItem-DM-Rqst ::= SEQUENCE {
    rL-Set-ID                          RL-Set-ID,
    iE-Extensions                       ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rqst-ExtIEs} } OPTIONAL,
    ...
}

RL-Set-InformationItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AllRL-DM-Rqst ::= NULL

AllRL-Set-DM-Rqst ::= NULL

-- *****
--
-- DEDICATED MEASUREMENT INITIATION RESPONSE
--
-- *****

DedicatedMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{DedicatedMeasurementInitiationResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{DedicatedMeasurementInitiationResponse-Extensions}}      OPTIONAL,
    ...
}

DedicatedMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID      CRITICALITY  ignore      TYPE      CRNC-CommunicationContextID      PRESENCE
      mandatory } |
    { ID id-MeasurementID                    CRITICALITY  ignore      TYPE      MeasurementID                    PRESENCE
      mandatory } |
    { ID id-DedicatedMeasurementObjectType-DM-Rsp      CRITICALITY  ignore      TYPE      DedicatedMeasurementObjectType-DM-Rsp      PRESENCE
      optional   } |

```



```

    { ID id-CriticalityDiagnostics          CRITICALITY ignore    TYPE CriticalityDiagnostics          PRESENCE
      optional },
      ...
    }

DedicatedMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
  rL                RL-DM-Rsp,
  rLS               RL-Set-DM-Rsp, -- for FDD only
  all-RL           RL-DM-Rsp,
  all-RLS         RL-Set-DM-Rsp, -- for FDD only
  ...
}

RL-DM-Rsp ::= SEQUENCE {
  rL-InformationList-DM-Rsp      RL-InformationList-DM-Rsp,
  iE-Extensions                 ProtocolExtensionContainer { { RLItem-DM-Rsp-ExtIEs } } OPTIONAL,
  ...
}

RLItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rsp }}

RL-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-DM-Rsp CRITICALITY ignore TYPE RL-InformationItem-DM-Rsp PRESENCE mandatory }
}

RL-InformationItem-DM-Rsp ::= SEQUENCE {
  rL-ID                RL-ID,
  dPCH-ID             DPCH-ID OPTIONAL, -- for TDD only
  dedicatedMeasurementValue DedicatedMeasurementValue,
  cFN                 CFN OPTIONAL,
  iE-Extensions       ProtocolExtensionContainer { { RL-InformationItem-DM-Rsp-ExtIEs } } OPTIONAL,
  ...
}

RL-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  {ID id-PUSCH-Info-DM-Rsp CRITICALITY reject EXTENSION PUSCH-Info-DM-Rsp PRESENCE optional},
  -- TDD only
  ...
}

PUSCH-Info-DM-Rsp ::= SEQUENCE (SIZE (0..maxNrOfPUSCHs)) OF PUSCH-ID

RL-Set-DM-Rsp ::= SEQUENCE {
  rL-Set-InformationList-DM-Rsp RL-Set-InformationList-DM-Rsp,
  iE-Extensions                 ProtocolExtensionContainer { { RL-SetItem-DM-Rsp-ExtIEs } } OPTIONAL,
}

```

```

}
...
}
RL-SetItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
RL-Set-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rsp }}
RL-Set-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
{ ID id-RL-Set-InformationItem-DM-Rsp CRITICALITY ignore TYPE RL-Set-InformationItem-DM-Rsp PRESENCE mandatory}
}
RL-Set-InformationItem-DM-Rsp ::= SEQUENCE {
rL-Set-ID RL-Set-ID,
dedicatedMeasurementValue DedicatedMeasurementValue,
cFN CFN OPTIONAL,
iE-Extensions ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rsp-ExtIEs } } OPTIONAL,
...
}
RL-Set-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
-- *****
--
-- DEDICATED MEASUREMENT INITIATION FAILURE
--
-- *****
DedicatedMeasurementInitiationFailure ::= SEQUENCE {
protocolIEs ProtocolIE-Container {{DedicatedMeasurementInitiationFailure-IEs}},
protocolExtensions ProtocolExtensionContainer {{DedicatedMeasurementInitiationFailure-Extensions}} OPTIONAL,
...
}
DedicatedMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
{ ID id-CRNC-CommunicationContextID CRITICALITY ignore TYPE CRNC-CommunicationContextID PRESENCE mandatory } |
{ ID id-MeasurementID CRITICALITY ignore TYPE MeasurementID PRESENCE mandatory } |
{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory } |
{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
...
}
DedicatedMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}
-- *****
--

```

```

-- DEDICATED MEASUREMENT REPORT
--
-- *****
DedicatedMeasurementReport ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{DedicatedMeasurementReport-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{DedicatedMeasurementReport-Extensions}}
  ...
}
DedicatedMeasurementReport-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID          CRITICALITY ignore TYPE CRNC-CommunicationContextID
    PRESENCE mandatory } |
  { ID id-MeasurementID                        CRITICALITY ignore TYPE MeasurementID
    PRESENCE mandatory } |
  { ID id-DedicatedMeasurementObjectType-DM-Rprt CRITICALITY ignore TYPE DedicatedMeasurementObjectType-
DM-Rprt PRESENCE mandatory } ,
  ...
}
DedicatedMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
DedicatedMeasurementObjectType-DM-Rprt ::= CHOICE {
  rL                      RL-DM-Rprt,
  rLS                     RL-Set-DM-Rprt, -- for FDD only
  all-RL                  RL-DM-Rprt,
  all-RLS                 RL-Set-DM-Rprt, -- for FDD only
  ...
}
RL-DM-Rprt ::= SEQUENCE {
  rL-InformationList-DM-Rprt  RL-InformationList-DM-Rprt,
  iE-Extensions              ProtocolExtensionContainer { { RLItem-DM-Rprt-ExtIEs } }
  ...
}
RLItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
RL-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rprt }}
RL-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-DM-Rprt CRITICALITY ignore TYPE RL-InformationItem-DM-Rprt PRESENCE mandatory }
}
RL-InformationItem-DM-Rprt ::= SEQUENCE {
  rL-ID                    RL-ID,
  dPCH-ID                  DPCH-ID OPTIONAL, -- for TDD only
  dedicatedMeasurementValueInformation  DedicatedMeasurementValueInformation,
  iE-Extensions            ProtocolExtensionContainer { { RL-InformationItem-DM-Rprt-ExtIEs } }
  ...
}

```

```

}
...
RL-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  {ID id-PUSCH-Info-DM-Rprt      CRITICALITY reject      EXTENSION  PUSCH-Info-DM-Rprt      PRESENCE optional},
  -- TDD only
  ...
}

PUSCH-Info-DM-Rprt ::= SEQUENCE (SIZE (0..maxNrOfPUSCHs)) OF PUSCH-ID

RL-Set-DM-Rprt ::= SEQUENCE {
  rL-Set-InformationList-DM-Rprt      RL-Set-InformationList-DM-Rprt,
  iE-Extensions                       ProtocolExtensionContainer { { RL-SetItem-DM-Rprt-ExtIEs } }      OPTIONAL,
  ...
}

RL-SetItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { { RL-Set-InformationItemIE-DM-Rprt } }

RL-Set-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
  { ID id-RL-Set-InformationItem-DM-Rprt CRITICALITY ignore TYPE RL-Set-InformationItem-DM-Rprt PRESENCE mandatory }
}

RL-Set-InformationItem-DM-Rprt ::= SEQUENCE {
  rL-Set-ID                           RL-Set-ID,
  dedicatedMeasurementValueInformation DedicatedMeasurementValueInformation,
  iE-Extensions                       ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rprt-ExtIEs } } OPTIONAL,
  ...
}

RL-Set-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- DEDICATED MEASUREMENT TERMINATION REQUEST
--
-- *****

DedicatedMeasurementTerminationRequest ::= SEQUENCE {
  protocolIEs           ProtocolIE-Container  {{DedicatedMeasurementTerminationRequest-IEs}},
  protocolExtensions   ProtocolExtensionContainer  {{DedicatedMeasurementTerminationRequest-Extensions}}      OPTIONAL,
  ...
}

DedicatedMeasurementTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID CRITICALITY ignore TYPE NodeB-CommunicationContextID PRESENCE mandatory } |

```

```

    { ID      id-MeasurementID          CRITICALITY  ignore          TYPE      MeasurementID          PRESENCE mandatory
    },
    ...
}

DedicatedMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DEDICATED MEASUREMENT FAILURE INDICATION
--
-- *****

DedicatedMeasurementFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementFailureIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DedicatedMeasurementFailureIndication-Extensions}}    OPTIONAL,
    ...
}

DedicatedMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID    CRITICALITY  ignore          TYPE      CRNC-CommunicationContextID    PRESENCE mandatory } |
    { ID      id-MeasurementID                  CRITICALITY  ignore          TYPE      MeasurementID                  PRESENCE mandatory
    } |
    { ID      id-Cause                          CRITICALITY  ignore          TYPE      Cause                          PRESENCE mandatory
    },
    ...
}

DedicatedMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK FAILURE INDICATION
--
-- *****

RadioLinkFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkFailureIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkFailureIndication-Extensions}}    OPTIONAL,
    ...
}

RadioLinkFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID    CRITICALITY  ignore          TYPE      CRNC-CommunicationContextID    PRESENCE
    mandatory } |
    { ID      id-Reporting-Object-RL-FailureInd  CRITICALITY  ignore          TYPE      Reporting-Object-RL-FailureInd  PRESENCE mandatory
    },
    ...
}

```

```

RadioLinkFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Reporting-Object-RL-FailureInd ::= CHOICE {
  rL                RL-RL-FailureInd,
  rL-Set            RL-Set-RL-FailureInd, --FDD only
  ...,
  cCTrCH            CCTrCH-RL-FailureInd --TDD only
}

RL-RL-FailureInd ::= SEQUENCE {
  rL-InformationList-RL-FailureInd  RL-InformationList-RL-FailureInd,
  iE-Extensions                     ProtocolExtensionContainer { { RLItem-RL-FailureInd-ExtIEs } }      OPTIONAL,
  ...
}

RLItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-FailureInd}}

RL-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
  { ID      id-RL-InformationItem-RL-FailureInd      CRITICALITY      ignore      TYPE      RL-InformationItem-RL-FailureInd      PRESENCE
  mandatory}
}

RL-InformationItem-RL-FailureInd ::= SEQUENCE {
  rL-ID                RL-ID,
  cause                Cause,
  iE-Extensions        ProtocolExtensionContainer { { RL-InformationItem-RL-FailureInd-ExtIEs } }      OPTIONAL,
  ...
}

RL-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-RL-FailureInd ::= SEQUENCE {
  rL-Set-InformationList-RL-FailureInd  RL-Set-InformationList-RL-FailureInd,
  iE-Extensions                         ProtocolExtensionContainer { { RL-SetItem-RL-FailureInd-ExtIEs } }      OPTIONAL,
  ...
}

RL-SetItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-FailureInd }}

```

```

RL-Set-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
  { ID id-RL-Set-InformationItem-RL-FailureInd    CRITICALITY ignore      TYPE RL-Set-InformationItem-RL-FailureInd    PRESENCE mandatory  }
}

```

```

RL-Set-InformationItem-RL-FailureInd ::= SEQUENCE {
  rL-Set-ID          RL-Set-ID,
  cause              Cause,
  iE-Extensions      ProtocolExtensionContainer { { RL-Set-InformationItem-RL-FailureInd-ExtIEs } } OPTIONAL,
  ...
}

```

```

RL-Set-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

CCTrCH-RL-FailureInd ::= SEQUENCE {
  rL-ID              RL-ID,
  cCTrCH-InformationList-RL-FailureInd  CCTrCH-InformationList-RL-FailureInd,
  iE-Extensions      ProtocolExtensionContainer { { CCTrCHItem-RL-FailureInd-ExtIEs } }      OPTIONAL,
  ...
}

```

```

CCTrCHItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

CCTrCH-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-FailureInd}}

```

```

CCTrCH-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
  { ID id-CCTrCH-InformationItem-RL-FailureInd    CRITICALITY ignore      TYPE CCTrCH-InformationItem-RL-FailureInd    PRESENCE mandatory }
}

```

```

CCTrCH-InformationItem-RL-FailureInd ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  cause              Cause,
  iE-Extensions      ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-FailureInd-ExtIEs } }      OPTIONAL,
  ...
}

```

```

CCTrCH-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

-- *****
--
-- RADIO LINK PREEMPTION REQUIRED INDICATION
--
-- *****

```

```

RadioLinkPreemptionRequiredIndication ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container      {{RadioLinkPreemptionRequiredIndication-IEs}},
}

```

```

    protocolExtensions          ProtocolExtensionContainer {{RadioLinkPreemptionRequiredIndication-Extensions}}
    ...
}

RadioLinkPreemptionRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE          CRNC-CommunicationContextID
    PRESENCE mandatory          } |
  { ID id-RL-InformationList-RL-PreemptRequiredInd  CRITICALITY ignore TYPE RL-InformationList-RL-PreemptRequiredInd  PRESENCE optional },
  ...
}

RadioLinkPreemptionRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationList-RL-PreemptRequiredInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIE-RL-PreemptRequiredInd}}

RL-InformationItemIE-RL-PreemptRequiredInd NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-RL-PreemptRequiredInd          CRITICALITY ignore TYPE RL-InformationItem-RL-PreemptRequiredInd          PRESENCE mandatory
  },
  ...
}

RL-InformationItem-RL-PreemptRequiredInd ::= SEQUENCE {
  rL-ID          RL-ID,
  iE-Extensions          ProtocolExtensionContainer { {RL-InformationItem-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationItem-RL-PreemptRequiredInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RESTORE INDICATION
--
-- *****

RadioLinkRestoreIndication ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container {{RadioLinkRestoreIndication-IEs}},
  protocolExtensions          ProtocolExtensionContainer {{RadioLinkRestoreIndication-Extensions}}
  ...
}

RadioLinkRestoreIndication-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE          CRNC-CommunicationContextID          PRESENCE
    mandatory          } |
  { ID id-Reporting-Object-RL-RestoreInd          CRITICALITY ignore          TYPE          Reporting-Object-RL-RestoreInd          PRESENCE mandatory
  },
  ...
}

```



```

RadioLinkRestoreIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Reporting-Object-RL-RestoreInd ::= CHOICE {
    rL                RL-RL-RestoreInd,
    rL-Set            RL-Set-RL-RestoreInd, --FDD only
    ...,
    cCTrCH            CCTrCH-RL-RestoreInd --TDD only
}

RL-RL-RestoreInd ::= SEQUENCE {
    rL-InformationList-RL-RestoreInd    RL-InformationList-RL-RestoreInd,
    iE-Extensions                       ProtocolExtensionContainer { { RLItem-RL-RestoreInd-ExtIEs } }    OPTIONAL,
    ...
}

RLItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationItemIE-RL-RestoreInd}}

RL-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
    { ID      id-RL-InformationItem-RL-RestoreInd      CRITICALITY    ignore          TYPE      RL-InformationItem-RL-RestoreInd      PRESENCE
    mandatory}
}

RL-InformationItem-RL-RestoreInd ::= SEQUENCE {
    rL-ID                RL-ID,
    iE-Extensions        ProtocolExtensionContainer { { RL-InformationItem-RL-RestoreInd-ExtIEs } }    OPTIONAL,
    ...
}

RL-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-RL-RestoreInd ::= SEQUENCE {
    rL-Set-InformationList-RL-RestoreInd    RL-Set-InformationList-RL-RestoreInd,
    iE-Extensions                           ProtocolExtensionContainer { { RL-SetItem-RL-RestoreInd-ExtIEs } }    OPTIONAL,
    ...
}

RL-SetItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-RestoreInd }}

RL-Set-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {

```

```

    { ID id-RL-Set-InformationItem-RL-RestoreInd      CRITICALITY ignore      TYPE RL-Set-InformationItem-RL-RestoreInd PRESENCE mandatory }
  }

RL-Set-InformationItem-RL-RestoreInd ::= SEQUENCE {
  rL-Set-ID          RL-Set-ID,
  iE-Extensions      ProtocolExtensionContainer { { RL-Set-InformationItem-RL-RestoreInd-ExtIEs } } OPTIONAL,
  ...
}

RL-Set-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CCTrCH-RL-RestoreInd ::= SEQUENCE {
  rL-ID          RL-ID,
  cCTrCH-InformationList-RL-RestoreInd      CCTrCH-InformationList-RL-RestoreInd,
  iE-Extensions      ProtocolExtensionContainer { { CCTrCHItem-RL-RestoreInd-ExtIEs } }      OPTIONAL,
  ...
}

CCTrCHItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CCTrCH-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-RestoreInd}}

CCTrCH-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
  { ID      id-CCTrCH-InformationItem-RL-RestoreInd      CRITICALITY      ignore      TYPE      CCTrCH-InformationItem-RL-RestoreInd      PRESENCE      mandatory}
}

CCTrCH-InformationItem-RL-RestoreInd ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  iE-Extensions      ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-RestoreInd-ExtIEs } }      OPTIONAL,
  ...
}

CCTrCH-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- COMPRESSED MODE COMMAND FDD
--
-- *****

CompressedModeCommand ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container      {{CompressedModeCommand-IEs}},
  protocolExtensions      ProtocolExtensionContainer      {{CompressedModeCommand-Extensions}}      OPTIONAL,
  ...
}

```

```

CompressedModeCommand-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-NodeB-CommunicationContextID      CRITICALITY      ignore      TYPE      NodeB-CommunicationContextID      PRESENCE
    mandatory } |
  { ID      id-Active-Pattern-Sequence-Information CRITICALITY      ignore      TYPE      Active-Pattern-Sequence-Information PRESENCE
    mandatory },
  ...
}

CompressedModeCommand-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- ERROR INDICATION
--
-- *****

ErrorIndication ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container      {{ErrorIndication-IEs}},
  protocolExtensions ProtocolExtensionContainer {{ErrorIndication-Extensions}}      OPTIONAL,
  ...
}

ErrorIndication-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CRNC-CommunicationContextID      CRITICALITY      ignore      TYPE      CRNC-CommunicationContextID      PRESENCE optional } |
  { ID      id-NodeB-CommunicationContextID      CRITICALITY      ignore      TYPE      NodeB-CommunicationContextID      PRESENCE optional } |
  { ID      id-Cause      CRITICALITY      ignore      TYPE      Cause      PRESENCE
    optional } |
  { ID      id-CriticalityDiagnostics      CRITICALITY      ignore      TYPE      CriticalityDiagnostics      PRESENCE optional },
  ...
}

ErrorIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- PRIVATE MESSAGE
--
-- *****

PrivateMessage ::= SEQUENCE {
  privateIEs      PrivateIE-Container {{PrivateMessage-IEs}},
  ...
}

PrivateMessage-IEs NBAP-PRIVATE-IES ::= {
  ...
}

```

```
-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST FDD
--
-- *****
```

```
PhysicalSharedChannelReconfigurationRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{PhysicalSharedChannelReconfigurationRequestFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestFDD-Extensions}}  OPTIONAL,
    ...
}
```

```
PhysicalSharedChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY    reject          TYPE      C-ID          PRESENCE
    mandatory } |
    { ID      id-SFN          CRITICALITY    reject          TYPE      SFN          PRESENCE
    optional } |
    { ID      id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst  CRITICALITY    reject          TYPE      MaximumTransmissionPower  PRESENCE
    optional } |
    { ID      id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst  CRITICALITY    reject          TYPE      DL-ScramblingCode          PRESENCE
    optional } |
    { ID      id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst  CRITICALITY    reject          TYPE      HS-PDSCH-FDD-Code-Information  PRESENCE
    optional } |
    { ID      id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst  CRITICALITY    reject          TYPE      HS-SCCH-FDD-Code-Information  PRESENCE
    optional },
    ...
}
```

```
PhysicalSharedChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****
```

```
PhysicalSharedChannelReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{PhysicalSharedChannelReconfigurationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestTDD-Extensions}}  OPTIONAL,
    ...
}
```

```
PhysicalSharedChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY    reject          TYPE      C-ID          PRESENCE
    PRESENCE mandatory } |
    { ID      id-SFN          CRITICALITY    reject          TYPE      SFN          PRESENCE
    PRESENCE optional } |
    { ID      id-PDSCHSets-AddList-PSCH-ReconfRqst  CRITICALITY    reject          TYPE      PDSCHSets-AddList-PSCH-ReconfRqst  PRESENCE
    optional } |
}
```

```

{ ID id-PDSCHSets-ModifyList-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCHSets-ModifyList-PSCH-ReconfRqst PRESENCE
optional } |
{ ID id-PDSCHSets-DeleteList-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCHSets-DeleteList-PSCH-ReconfRqst PRESENCE
optional } |
{ ID id-PUSCHSets-AddList-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCHSets-AddList-PSCH-ReconfRqst PRESENCE
optional } |
{ ID id-PUSCHSets-ModifyList-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCHSets-ModifyList-PSCH-ReconfRqst PRESENCE
optional } |
{ ID id-PUSCHSets-DeleteList-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCHSets-DeleteList-PSCH-ReconfRqst PRESENCE
optional },
...
}

PhysicalSharedChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst CRITICALITY reject EXTENSION HS-PDSCH-TDD-Information-PSCH-ReconfRqst
PRESENCE optional } |
{ ID id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst CRITICALITY reject EXTENSION Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
PRESENCE optional } |
{ ID id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst CRITICALITY reject EXTENSION Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
PRESENCE optional } |
{ ID id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst CRITICALITY reject EXTENSION Delete-From-HS-SCCH-Resource-Pool-PSCH-
ReconfRqst PRESENCE optional },
...
}

PDSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-AddItem-PSCH-ReconfRqst

PDSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
pDSCHSet-ID PDSCHSet-ID,
pDSCH-InformationList PDSCH-Information-AddList-PSCH-ReconfRqst OPTIONAL,
iE-Extensions ProtocolExtensionContainer { {PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
...
}

PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ID id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PDSCH-AddInformation-LCR-PSCH-ReconfRqst PRESENCE
optional},
...
}

PDSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Container {{ PDSCH-Information-AddListIEs-PSCH-ReconfRqst }} -- Mandatory for
3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD

PDSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
{ID id-PDSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE
mandatory}
}

PDSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
repetitionPeriod RepetitionPeriod,
repetitionLength RepetitionLength,
tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
dL-Timeslot-InformationAddList-PSCH-ReconfRqst DL-Timeslot-InformationAddList-PSCH-ReconfRqst,

```

```

    iE-Extensions          ProtocolExtensionContainer { {PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
  }

PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationAddItem-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlot                TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType,
  tFCI-Presence           TFCI-Presence,
  dL-Code-InformationAddList-PSCH-ReconfRqst DL-Code-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions          ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF DL-Code-InformationAddItem-PSCH-ReconfRqst

DL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  pDSCH-ID                PDSCH-ID,
  tdd-ChannelisationCode  TDD-ChannelisationCode,
  iE-Extensions          ProtocolExtensionContainer { { DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PDSCH-AddInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst }} -- Mandatory
for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD

PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
  {ID id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
  PRESENCE optional}
}

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
  repetitionPeriod        RepetitionPeriod,
  repetitionLength        RepetitionLength,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  dL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
  iE-Extensions          ProtocolExtensionContainer { {PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

```

```

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR,
    tFCI-Presence               TFCI-Presence,
    dL-Code-InformationAddList-LCR-PSCH-ReconfRqst DL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions               ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst

DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                    PDSCH-ID,
    tdd-ChannelisationCodeLCR   TDD-ChannelisationCodeLCR,
    iE-Extensions               ProtocolExtensionContainer { { DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-ModifyItem-PSCH-ReconfRqst

PDSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID                 PDSCHSet-ID,
    pDSCH-InformationList       PDSCH-Information-ModifyList-PSCH-ReconfRqst,
    iE-Extensions               ProtocolExtensionContainer { {PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst
    PRESENCE optional}, -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
    ...
}

PDSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst } }

PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE optional} -- Mandatory for 3.84Mcps TDD only, Not Applicable to 1.28Mcps TDD
}

```

```

PDSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod          OPTIONAL,
    repetitionLength          RepetitionLength          OPTIONAL,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
    dL-Timeslot-InformationModifyList-PSCH-ReconfRqst DL-Timeslot-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { {PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
    tFCI-Presence           TFCI-Presence OPTIONAL,
    dL-Code-InformationModifyList-PSCH-ReconfRqst DL-Code-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { { DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                PDSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions           ProtocolExtensionContainer { { DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst PRESENCE mandatory}
}

PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod          OPTIONAL,
    repetitionLength          RepetitionLength          OPTIONAL,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
    dL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
}

```



```

    iE-Extensions          ProtocolExtensionContainer { {PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    ...
}

PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR              TimeSlotLCR,
    midambleShiftLCR        MidambleShiftLCR    OPTIONAL,
    tFCI-Presence           TFCI-Presence    OPTIONAL,
    dL-Code-LCR-InformationModifyList-PSCH-ReconfRqst DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    ...
}

DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                PDSCH-ID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    iE-Extensions          ProtocolExtensionContainer { { DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-DeleteItem-PSCH-ReconfRqst

PDSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID            PDSCHSet-ID,
    iE-Extensions          ProtocolExtensionContainer { {PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-AddItem-PSCH-ReconfRqst

PUSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {

```

```

pUSCHSet-ID          PUSCHSet-ID,
pUSCH-InformationList PUSCH-Information-AddList-PSCH-ReconfRqst  OPTIONAL, -- Mandatory for 3.84Mcps TDD, Not Applicable
to 1.28Mcps TDD
iE-Extensions       ProtocolExtensionContainer { {PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} }  OPTIONAL,
...
}

PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  {ID id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst  CRITICALITY reject  EXTENSION  PUSCH-AddInformation-LCR-PSCH-ReconfRqst  PRESENCE
  optional}, -- Mandatory for 1.28Mcps TDD only, Not Applicable to 3.84Mcps TDD
  ...
}

PUSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-AddListIEs-PSCH-ReconfRqst }} Mandatory for
3.84Mcps TDD only

PUSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
  {ID id-PUSCH-Information-AddListIE-PSCH-ReconfRqst  CRITICALITY reject  TYPE  PUSCH-Information-AddItem-PSCH-ReconfRqst  PRESENCE
  mandatory}
}

PUSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  uL-Timeslot-InformationAddList-PSCH-ReconfRqst  UL-Timeslot-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions            ProtocolExtensionContainer { {PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} }  OPTIONAL,
  ...
}

PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-PSCH-ReconfRqst

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlot          TimeSlot,
  midambleShiftAndBurstType  MidambleShiftAndBurstType,
  tFCI-Presence      TFCI-Presence,
  uL-Code-InformationAddList-PSCH-ReconfRqst  UL-Code-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions            ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }  OPTIONAL,
  ...
}

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF UL-Code-InformationAddItem-PSCH-ReconfRqst

UL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  pUSCH-ID          PUSCH-ID,

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    tdd-ChannelisationCode          TDD-ChannelisationCode,
    iE-Extensions                    ProtocolExtensionContainer { { UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCH-AddInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PUSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst } }

PUSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
    PRESENCE optional}
}

PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                RepetitionPeriod,
    repetitionLength                 RepetitionLength,
    tdd-PhysicalChannelOffset        TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions                    ProtocolExtensionContainer { {PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst

UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                     TimeSlotLCR,
    midambleShiftLCR                MidambleShiftLCR,
    tFCI-Presence                    TFCI-Presence,
    uL-Code-InformationAddList-LCR-PSCH-ReconfRqst UL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions                    ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst

UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                         PUSCH-ID,
    tdd-ChannelisationCodeLCR        TDD-ChannelisationCodeLCR,
    iE-Extensions                    ProtocolExtensionContainer { { UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

```

```

UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-ModifyItem-PSCH-ReconfRqst

PUSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID PUSCHSet-ID,
    pUSCH-InformationList PUSCH-Information-ModifyList-PSCH-ReconfRqst OPTIONAL, -- Applicable to 3.84Mcps TDD
    only
    iE-Extensions ProtocolExtensionContainer { {PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst
    PRESENCE optional}, -- Applicable to For 1.28Mcps TDD only
    ...
}

PUSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst } } -- For 3.84Mcps
TDD only

PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE mandatory}
}

PUSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod RepetitionPeriod OPTIONAL,
    repetitionLength RepetitionLength OPTIONAL,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
    uL-Timeslot-InformationModifyList-PSCH-ReconfRqst UL-Timeslot-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
    tFCI-Presence TFCI-Presence OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst UL-Code-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

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```

}
...
}
UL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst
UL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions           ProtocolExtensionContainer { { UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}
UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRqst } }
PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst      CRITICALITY reject      TYPE      PUSCH-ModifyInformation-LCR-
ModifyItem-PSCH-ReconfRqst      PRESENCE      optional}
}
PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod        RepetitionPeriod      OPTIONAL,
    repetitionLength        RepetitionLength      OPTIONAL,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
    uL-Timeslot-InformationModifyList-LCR-PSCH-ReconfRqst UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { {PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
OPTIONAL,
    ...
}
PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst
UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR          MidambleShiftLCR      OPTIONAL,
    tFCI-Presence              TFCI-Presence      OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst UL-Code-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }
OPTIONAL,
    ...
}
UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

UL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR,
    iE-Extensions              ProtocolExtensionContainer { { UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-DeleteItem-PSCH-ReconfRqst

PUSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID                PUSCHSet-ID,
    iE-Extensions              ProtocolExtensionContainer { { PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-PDSCH-TDD-Information-PSCH-ReconfRqst ::= SEQUENCE {
    dL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst                DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst    OPTIONAL,
    dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst            DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { HS-PDSCH-TDD-Information-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

HS-PDSCH-TDD-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSS)) OF DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst

DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType    MidambleShiftAndBurstType,
    iE-Extensions              ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst-ExtIEs } }
    OPTIONAL,
    ...
}

DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-
ReconfRqst

```

```

DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlotLCR,
    midambleShiftAndBurstType MidambleShiftLCR,
    iE-Extensions           ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs } }
    OPTIONAL,
    ...
}

DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-Information-PSCH-ReconfRqst    HS-SCCH-Information-PSCH-ReconfRqst    OPTIONAL,
    hS-SCCH-Information-LCR-PSCH-ReconfRqst HS-SCCH-Information-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { { Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SCCH-Information-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-PSCH-ReconfRqst

HS-SCCH-InformationItem-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                HS-SCCH-ID,
    timeSlot                  TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tdd-ChannelisationCode    TDD-ChannelisationCode,
    hS-SCCH-MaxPower          DL-Power,
    hS-SICH-Information        HS-SICH-Information-PSCH-ReconfRqst,
    iE-Extensions             ProtocolExtensionContainer { { HS-SCCH-InformationItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

HS-SCCH-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SICH-Information-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tdd-ChannelisationCode    TDD-ChannelisationCode,
    iE-Extensions           ProtocolExtensionContainer { { HS-SICH-Information-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

HS-SICH-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SCCH-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst

```

```

HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                HS-SCCH-ID,
    timeSlotLCR               TimeSlotLCR,
    midambleShiftLCR          MidambleShiftLCR,
    tdd-ChannelisationCode    TDD-ChannelisationCodeLCR,
    hS-SCCH-MaxPower          DL-Power,
    hS-SICH-Information-LCR    HS-SICH-Information-LCR-PSCH-ReconfRqst,
    iE-Extensions             ProtocolExtensionContainer { { HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SICH-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR               TimeSlotLCR,
    midambleShiftLCR          MidambleShiftLCR,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    iE-Extensions             ProtocolExtensionContainer { { HS-SICH-Information-LCR-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

HS-SICH-Information-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-InformationModify-PSCH-ReconfRqst    HS-SCCH-InformationModify-PSCH-ReconfRqst    OPTIONAL,
    hS-SCCH-InformationModify-LCR-PSCH-ReconfRqst HS-SCCH-InformationModify-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions                                ProtocolExtensionContainer { { Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    ...
}

Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SCCH-InformationModify-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-PSCH-ReconfRqst

HS-SCCH-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                HS-SCCH-ID,
    timeSlot                   TimeSlot    OPTIONAL,
    midambleShiftAndBurstType MidambleShiftAndBurstType    OPTIONAL,
    tdd-ChannelisationCode     TDD-ChannelisationCode    OPTIONAL,
    hS-SCCH-MaxPower           DL-Power    OPTIONAL,
    hS-SICH-Information         HS-SICH-Information-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

```



```

HS-SCCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

HS-SICH-InformationModify-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlot          OPTIONAL,
  midambleShiftAndBurstType  OPTIONAL,
  tdd-ChannelisationCode  OPTIONAL,
  iE-Extensions     ProtocolExtensionContainer { { HS-SICH-InformationModify-PSCH-ReconfRqst-ExtIEs} }  OPTIONAL,
  ...
}

HS-SICH-InformationModify-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

HS-SCCH-InformationModify-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst

HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
  hS-SCCH-ID          HS-SCCH-ID,
  timeSlotLCR        TimeSlotLCR          OPTIONAL,
  midambleShiftLCR   MidambleShiftLCR     OPTIONAL,
  tdd-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR  OPTIONAL,
  hS-SCCH-MaxPower   DL-Power             OPTIONAL,
  hS-SICH-Information-LCR  HS-SICH-Information-LCR-PSCH-ReconfRqst  OPTIONAL,
  iE-Extensions     ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs} }  OPTIONAL,
  ...
}

HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

HS-SICH-InformationModify-LCR-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlotLCR        TimeSlotLCR          OPTIONAL,
  midambleShiftLCR   MidambleShiftLCR     OPTIONAL,
  tdd-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR  OPTIONAL,
  iE-Extensions     ProtocolExtensionContainer { { HS-SICH-InformationModify-LCR-PSCH-ReconfRqst-ExtIEs} }  OPTIONAL,
  ...
}

HS-SICH-InformationModify-LCR-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst

Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst ::= SEQUENCE {
  hS-SCCH-ID          HS-SCCH-ID,
  iE-Extensions     ProtocolExtensionContainer { { Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs} }  OPTIONAL,
  OPTIONAL,
  ...
}

```

```

Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE TDD
--
-- *****

PhysicalSharedChannelReconfigurationResponseTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{PhysicalSharedChannelReconfigurationResponseTDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationResponseTDD-Extensions}}
  ...
}

PhysicalSharedChannelReconfigurationResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CriticalityDiagnostics          CRITICALITY ignore      TYPE      CriticalityDiagnostics          PRESENCE optional },
  ...
}

PhysicalSharedChannelReconfigurationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE TDD
--
-- *****

PhysicalSharedChannelReconfigurationFailureTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{PhysicalSharedChannelReconfigurationFailureTDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationFailureTDD-Extensions}}
  ...
}

PhysicalSharedChannelReconfigurationFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CauseLevel-PSCH-ReconfFailureTDD  CRITICALITY ignore  TYPE CauseLevel-PSCH-ReconfFailureTDD          PRESENCE mandatory },
  { ID      id-CriticalityDiagnostics          CRITICALITY ignore      TYPE      CriticalityDiagnostics          PRESENCE optional },
  ...
}

PhysicalSharedChannelReconfigurationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CauseLevel-PSCH-ReconfFailureTDD ::= CHOICE {
  generalCause          GeneralCauseList-PSCH-ReconfFailureTDD,
  setSpecificCause      SetSpecificCauseList-PSCH-ReconfFailureTDD,
  ...
}

```

```

}

GeneralCauseList-PSCH-ReconfFailureTDD ::= SEQUENCE {
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { { GeneralCauseItem-PSCH-ReconfFailureTDD-ExtIEs } }    OPTIONAL,
    ...
}

GeneralCauseItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SetSpecificCauseList-PSCH-ReconfFailureTDD ::= SEQUENCE {
    unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD    Unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD    OPTIONAL,
    unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD    Unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { SetSpecificCauseItem-PSCH-ReconfFailureTDD-ExtIEs } }    OPTIONAL,
    ...
}

SetSpecificCauseItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxNrOfPDSCHSets)) OF ProtocolIE-Single-Container {{ Unsuccessful-
PDSCHSetItemIE-PSCH-ReconfFailureTDD }}

Unsuccessful-PDSCHSetItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID    id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD    CRITICALITY ignore    TYPE Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDDPRESENCE
mandatory}
}

Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
    pDSCHSet-ID          PDSCHSet-ID,
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { {Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} }    OPTIONAL,
    ...
}

Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxNrOfPUSCHSets)) OF ProtocolIE-Single-Container {{ Unsuccessful-
PUSCHSetItemIE-PSCH-ReconfFailureTDD }}

Unsuccessful-PUSCHSetItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID    id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD    CRITICALITY ignore    TYPE Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDDPRESENCE
mandatory}
}

Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
    pUSCHSet-ID          PUSCHSet-ID,
    cause                Cause,

```

```

    iE-Extensions          ProtocolExtensionContainer { {Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} } OPTIONAL,
    ...
}

Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RESET REQUEST
--
-- *****

ResetRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{ResetRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{ResetRequest-Extensions}} OPTIONAL,
    ...
}

ResetRequest-IEs NBAP-PROTOCOL-IES ::= {
    {ID id-ResetIndicator    CRITICALITY ignore    TYPE    ResetIndicator    PRESENCE    mandatory},
    ...
}

ResetRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ResetIndicator ::= CHOICE {
    communicationContext    CommunicationContextList-Reset,
    communicationControlPort    CommunicationControlPortList-Reset,
    nodeB                    NULL,
    ...
}

CommunicationContextList-Reset ::= SEQUENCE {
    communicationContextInfoList-Reset    CommunicationContextInfoList-Reset,
    iE-Extensions                          ProtocolExtensionContainer { {CommunicationContextItem-Reset-ExtIEs} } OPTIONAL,
    ...
}

CommunicationContextItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommunicationContextInfoList-Reset ::= SEQUENCE (SIZE (1.. maxCommunicationContext)) OF ProtocolIE-Single-Container
{{ CommunicationContextInfoItemIE-Reset }}

CommunicationContextInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
    {ID id-CommunicationContextInfoItem-Reset    CRITICALITY reject    TYPE CommunicationContextInfoItem-Reset    PRESENCE mandatory}
}

```

```

CommunicationContextInfoItem-Reset ::= SEQUENCE {
    communicationContextType-Reset      CommunicationContextType-Reset,
    iE-Extensions                        ProtocolExtensionContainer { { CommunicationContextInfoItem-Reset-ExtIEs } }    OPTIONAL,
    ...
}

CommunicationContextInfoItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommunicationContextType-Reset ::= CHOICE {
    cRNC-CommunicationContextID        CRNC-CommunicationContextID,
    nodeB-CommunicationContextID       NodeB-CommunicationContextID,
    ...
}

CommunicationControlPortList-Reset ::= SEQUENCE {
    communicationControlPortInfoList-Reset      CommunicationControlPortInfoList-Reset,
    iE-Extensions                              ProtocolExtensionContainer { {CommunicationControlPortItem-Reset-ExtIEs} }    OPTIONAL,
    ...
}

CommunicationControlPortItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommunicationControlPortInfoList-Reset ::= SEQUENCE (SIZE (1.. maxCCPinNodeB)) OF ProtocolIE-Single-Container {{CommunicationControlPortInfoItemIE-Reset }}

CommunicationControlPortInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
    {ID id-CommunicationControlPortInfoItem-Reset      CRITICALITY reject      TYPE CommunicationControlPortInfoItem-Reset      PRESENCE mandatory}
}

CommunicationControlPortInfoItem-Reset ::= SEQUENCE {
    communicationControlPortID        CommunicationControlPortID,
    iE-Extensions                    ProtocolExtensionContainer { {CommunicationControlPortInfoItem-Reset-ExtIEs} } OPTIONAL,
    ...
}

CommunicationControlPortInfoItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RESET RESPONSE
--
-- *****

ResetResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{ResetResponse-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{ResetResponse-Extensions}}    OPTIONAL,
    ...
}

```

```

}

ResetResponse-IEs NBAP-PROTOCOL-IES ::= {
  {ID id-CriticalityDiagnostics      CRITICALITY   ignore      TYPE      CriticalityDiagnostics      PRESENCE optional},
  ...
}

ResetResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- INFORMATION EXCHANGE INITIATION REQUEST
--
-- *****

InformationExchangeInitiationRequest ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container      {{InformationExchangeInitiationRequest-IEs}},
  protocolExtensions      ProtocolExtensionContainer      {{InformationExchangeInitiationRequest-Extensions}}      OPTIONAL,
  ...
}

InformationExchangeInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-InformationExchangeID      CRITICALITY reject      TYPE      InformationExchangeID
    PRESENCE      mandatory      }|
  { ID      id-InformationExchangeObjectType-InfEx-Rqst      CRITICALITY reject      TYPE      InformationExchangeObjectType-
  InfEx-Rqst      PRESENCE      mandatory      }|
  -- This IE represents both the Information Exchange Object Type IE and the choice based on the Information Exchange Object Type
  -- as described in the tabular message format in subclause 9.1.
  { ID      id-InformationType      CRITICALITY reject      TYPE      InformationType      PRESENCE mandatory
  }|
  { ID      id-InformationReportCharacteristics      CRITICALITY reject      TYPE      InformationReportCharacteristics
    PRESENCE      mandatory},
  ...
}

InformationExchangeInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

InformationExchangeObjectType-InfEx-Rqst ::= CHOICE {
  cell      Cell-InfEx-Rqst,
  ...
}

Cell-InfEx-Rqst ::= SEQUENCE {
  c-ID      C-ID,
  iE-Extensions      ProtocolExtensionContainer      { { CellItem-InfEx-Rqst-ExtIEs } }      OPTIONAL,
  ...
}

CellItem-InfEx-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
-- *****
--
-- INFORMATION EXCHANGE INITIATION RESPONSE
--
-- *****

InformationExchangeInitiationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{InformationExchangeInitiationResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{InformationExchangeInitiationResponse-Extensions}}    OPTIONAL,
    ...
}

InformationExchangeInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-InformationExchangeID          CRITICALITY ignore          TYPE          InformationExchangeID
      PRESENCE mandatory }|
    { ID      id-InformationExchangeObjectType-InfEx-Rsp    CRITICALITY ignore          TYPE    InformationExchangeObjectType-InfEx-Rsp    PRESENCE
      optional }|
    { ID      id-CriticalityDiagnostics          CRITICALITY ignore          TYPE    CriticalityDiagnostics          PRESENCE optional },
    ...
}

InformationExchangeInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

InformationExchangeObjectType-InfEx-Rsp ::= CHOICE {
    cell                Cell-InfEx-Rsp,
    ...
}

Cell-InfEx-Rsp ::= SEQUENCE {
    requestedDataValue    RequestedDataValue,
    iE-Extensions         ProtocolExtensionContainer { { CellItem-InfEx-Rsp-ExtIEs } }    OPTIONAL,
    ...
}

CellItem-InfEx-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- INFORMATION EXCHANGE INITIATION FAILURE
--
-- *****

InformationExchangeInitiationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{InformationExchangeInitiationFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{InformationExchangeInitiationFailure-Extensions}}    OPTIONAL,
    ...
}

```

```

}

InformationExchangeInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-InformationExchangeID          CRITICALITY  ignore          TYPE      InformationExchangeID          PRESENCE mandatory }|
  { ID      id-Cause                          CRITICALITY  ignore          TYPE      Cause                          PRESENCE mandatory }|
  { ID      id-CriticalityDiagnostics          CRITICALITY  ignore          TYPE      CriticalityDiagnostics          PRESENCE optional },
  ...
}

InformationExchangeInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- INFORMATION REPORT
--
-- *****

InformationReport ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{InformationReport-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{InformationReport-Extensions}}    OPTIONAL,
  ...
}

InformationReport-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-InformationExchangeID          CRITICALITY  ignore          TYPE      InformationExchangeID          PRESENCE mandatory }|
  { ID      id-InformationExchangeObjectType-InfEx-Rprt  CRITICALITY  ignore          TYPE      InformationExchangeObjectType-InfEx-Rprt  PRESENCE mandatory },
  ...
}

InformationReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

InformationExchangeObjectType-InfEx-Rprt ::= CHOICE {
  cell                Cell-Inf-Rprt,
  ...
}

Cell-Inf-Rprt ::= SEQUENCE {
  requestedDataValueInformation  RequestedDataValueInformation,
  iE-Extensions                  ProtocolExtensionContainer {{ CellItem-Inf-Rprt-ExtIEs }}    OPTIONAL,
  ...
}

CellItem-Inf-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```



```
-- *****
--
-- INFORMATION EXCHANGE TERMINATION REQUEST
--
-- *****
```

```
InformationExchangeTerminationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{InformationExchangeTerminationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{InformationExchangeTerminationRequest-Extensions}}    OPTIONAL,
    ...
}
```

```
InformationExchangeTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-InformationExchangeID          CRITICALITY ignore          TYPE      InformationExchangeID          PRESENCE mandatory},
    ...
}
```

```
InformationExchangeTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
-- *****
--
-- INFORMATION EXCHANGE FAILURE INDICATION
--
-- *****
```

```
InformationExchangeFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{InformationExchangeFailureIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{InformationExchangeFailureIndication-Extensions}}    OPTIONAL,
    ...
}
```

```
InformationExchangeFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-InformationExchangeID          CRITICALITY ignore          TYPE      TYPE      InformationExchangeID          PRESENCE mandatory } |
    { ID      id-Cause                          CRITICALITY ignore          TYPE      Cause          PRESENCE mandatory },
    ...
}
```

```
InformationExchangeFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
-- *****
--
-- CELL SYNCHRONISATION INITIATION REQUEST TDD
--
-- *****
```

```
CellSynchronisationInitiationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSynchronisationInitiationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSynchronisationInitiationRequestTDD-Extensions}}    OPTIONAL,
    ...
}
```

```

}

CellSynchronisationInitiationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-SYNCD1CodeId-TransInitLCR-CellSyncInitiationRqstTDD CRITICALITY reject EXTENSION SYNCD1CodeId-
  TransInitLCR-CellSyncInitiationRqstTDD PRESENCE optional }| -- 1.28Mcps TDD only
  { ID id-SYNCD1CodeId-MeasureInitLCR-CellSyncInitiationRqstTDD CRITICALITY reject EXTENSION SYNCD1CodeId-
  MeasureInitLCR-CellSyncInitiationRqstTDD PRESENCE optional }, -- 1.28Mcps TDD only
  ...
}

CellSynchronisationInitiationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-C-ID CRITICALITY reject TYPE C-ID PRESENCE mandatory }|
  { ID id-cellSyncBurstRepetitionPeriod CRITICALITY reject TYPE CellSyncBurstRepetitionPeriod PRESENCE mandatory }|
  { ID id-timeslotInfo-CellSyncInitiationRqstTDD CRITICALITY reject TYPE TimeslotInfo-CellSyncInitiationRqstTDD PRESENCE
  optional }| -- Mandatory for 3.84Mcps TDD only
  { ID id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD CRITICALITY reject TYPE CellSyncBurstTransInit-
  CellSyncInitiationRqstTDD PRESENCE optional }| -- 3.84Mcps TDD only
  { ID id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD CRITICALITY reject TYPE CellSyncBurstMeasureInit-
  CellSyncInitiationRqstTDD PRESENCE optional }, -- 3.84Mcps TDD only
  ...
}

CellSyncBurstTransInit-CellSyncInitiationRqstTDD ::= SEQUENCE {
  cSBTransmissionID CSBTransmissionID,
  sfn SFN,
  cellSyncBurstCode CellSyncBurstCode,
  cellSyncBurstCodeShift CellSyncBurstCodeShift,
  initialDLTransPower DL-Power,
  iE-Extensions ProtocolExtensionContainer { { CellSyncBurstTransInit-CellSyncInitiationRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

CellSyncBurstTransInit-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TimeslotInfo-CellSyncInitiationRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlot

CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD ::= SEQUENCE {
  cSBMeasurementID CSBMeasurementID,
  cellSyncBurstCode CellSyncBurstCode,
  cellSyncBurstCodeShift CellSyncBurstCodeShift,
  synchronisationReportType SynchronisationReportType,
  sfn SFN OPTIONAL,
  synchronisationReportCharacteristics SynchronisationReportCharacteristics,
  iE-Extensions ProtocolExtensionContainer { { CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

SYNCd1CodeId-TransInitLCR-CellSyncInitiationRqstTDD ::= SEQUENCE {
    cSBTransmissionID          CSBTransmissionID,
    sfn                        SFN,
    uARFCN                     UARFCN,
    sYNCd1CodeId              sYNCd1CodeId,
    DwPCH-Power               DwPCH-Power,
    iE-Extensions             ProtocolExtensionContainer { { sYNCd1CodeId-TransInitLCR-CellSyncInitiationRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

SYNCd1CodeId-TransInitLCR-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

SYNCd1CodeId-MeasureInitLCR-CellSyncInitiationRqstTDD ::= SEQUENCE {
    cSBMeasurementID          CSBMeasurementID,
    sfn                        SFN OPTIONAL,
    uARFCN                     UARFCN,
    sYNCd1CodeId              sYNCd1CodeId,
    synchronisationReportType SynchronisationReportType,
    synchronisationReportCharacteristics SynchronisationReportCharacteristics,
    iE-Extensions             ProtocolExtensionContainer { { sYNCd1CodeId-MeasureInitLCR-CellSyncInitiationRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

SYNCd1CodeId-MeasureInitLCR-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- CELL SYNCHRONISATION INITIATION RESPONSE TDD
--
-- *****

```

```

CellSynchronisationInitiationResponseTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationInitiationResponseTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CellSynchronisationInitiationResponseTDD-Extensions}} OPTIONAL,
    ...
}

```

```

CellSynchronisationInitiationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

CellSynchronisationInitiationResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics          CRITICALITY      ignore      TYPE      CriticalityDiagnostics          PRESENCE
      optional  },
    ...
}

```

```

-- *****
--

```

```

-- CELL SYNCHRONISATION INITIATION FAILURE TDD
--
-- *****
CellSynchronisationInitiationFailureTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{CellSynchronisationInitiationFailureTDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{CellSynchronisationInitiationFailureTDD-Extensions}}  OPTIONAL,
  ...
}

CellSynchronisationInitiationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CellSynchronisationInitiationFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Cause          CRITICALITY  ignore      TYPE      Cause          PRESENCE mandatory
  }|
  { ID      id-CriticalityDiagnostics  CRITICALITY  ignore      TYPE      CriticalityDiagnostics  PRESENCE optional },
  ...
}

-- *****
--
-- CELL SYNCHRONISATION RECONFIGURATION REQUEST TDD
--
-- *****

CellSynchronisationReconfigurationRequestTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{CellSynchronisationReconfigurationRequestTDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{CellSynchronisationReconfigurationRequestTDD-Extensions}}  OPTIONAL,
  ...
}

CellSynchronisationReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID      id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD  CRITICALITY  reject      EXTENSION      NSubCyclesPerCyclePeriod
  PRESENCE  optional  }| -- 1.28Mcps TDD only
  { ID      id-SYNCD1CodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD  CRITICALITY  reject      EXTENSION
  SYNCD1CodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD  PRESENCE  optional  }| -- 1.28Mcps TDD only
  { ID      id-SYNCD1CodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD  CRITICALITY  reject      EXTENSION
  SYNCD1CodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD  PRESENCE  optional  }, -- 1.28Mcps TDD only
  ...
}

CellSynchronisationReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-C-ID          CRITICALITY  reject      TYPE      C-ID          PRESENCE  mandatory
  }|
  { ID      id-TimeSlot      CRITICALITY  reject      TYPE      TimeSlot      PRESENCE  mandatory  }|
  -- 1.28Mcps TDD - There is no Time Slot indication needed, the CRNC should indicate Time Slot 0 and the Node B shall ignore it
  { ID      id-NCyclesPerSFNperiod  CRITICALITY  reject      TYPE      NCyclesPerSFNperiod  PRESENCE  mandatory  }|
  { ID      id-NRepetitionsPerCyclePeriod  CRITICALITY  reject      TYPE      NRepetitionsPerCyclePeriod  PRESENCE  mandatory  }|
  { ID      id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD  CRITICALITY  reject      TYPE
  CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD  PRESENCE  optional  }| -- 3.84Mcps TDD only
}

```

```

{ ID id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD CRITICALITY reject TYPE
CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD PRESENCE optional }, -- 3.84Mcps TDD only
...
}

CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstTransInfoItem-
CellSyncReconfRqstTDD

CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
cSBTransmissionID CSBTransmissionID,
syncFrameNumberToTransmit SyncFrameNumber,
cellSyncBurstCode CellSyncBurstCode OPTIONAL,
cellSyncBurstCodeShift CellSyncBurstCodeShift OPTIONAL,
dlTransPower DL-Power OPTIONAL,
iE-Extensions ProtocolExtensionContainer { { CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD-ExtIEs} }
OPTIONAL,
...
}

CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD ::= ProtocolIE-Single-Container {{ CellSyncBurstMeasInfo-CellSyncReconfRqstTDD }}

CellSyncBurstMeasInfo-CellSyncReconfRqstTDD NBAP-PROTOCOL-IES ::= {
{ ID id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD CRITICALITY reject TYPE CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD PRESENCE
mandatory }}
{ ID id-SynchronisationReportType CRITICALITY reject TYPE SynchronisationReportType PRESENCE
optional }}
{ ID id-SynchronisationReportCharacteristics CRITICALITY reject TYPE SynchronisationReportCharacteristics PRESENCE optional },
...
}

CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD

CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
syncFrameNrToReceive SyncFrameNumber,
syncBurstInfo CellSyncBurstInfoList-CellSyncReconfRqstTDD,
...
}

CellSyncBurstInfoList-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfoItem-CellSyncReconfRqstTDD

CellSyncBurstInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
cSBMeasurementID CSBMeasurementID,
cellSyncBurstCode CellSyncBurstCode,
cellSyncBurstCodeShift CellSyncBurstCodeShift,
iE-Extensions ProtocolExtensionContainer { { CellSyncBurstMeasInfo-CellSyncReconfRqstTDD-ExtIEs} } OPTIONAL,
...
}

CellSyncBurstMeasInfo-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}

SYNCD1CodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD ::= SEQUENCE {SIZE {1..maxNrofSyncFramesLCR} OF SYNCD1CodeIdTransReconfItemLCR-
CellSyncReconfRqstTDD

SYNCD1CodeIdTransReconfItemLCR-CellSyncReconfRqstTDD ::= SEQUENCE {
    cSBTransmissionID          CSBTransmissionID,
    syncFrameNumberforTransmit SyncFrameNumber,
    uARFCN                      UARFCN,
    sYNCD1CodeId                SYNCD1CodeId    OPTIONAL,
    DwPCH-Power                 DwPCH-Power    OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { { SYNCD1CodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

SYNCD1CodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD-ExtIEs ::= {
    ...
}

SYNCD1CodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD ::= ProtocolIE-Single-Container { { SYNCD1CodeIdMeasInfoLCR-CellSyncReconfRqstTDD } }

SYNCD1CodeIdMeasInfoLCR-CellSyncReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-SYNCD1CodeIdMeasInfoList-CellSyncReconfRqstTDD CRITICALITY reject EXTENSION SYNCD1CodeIdMeasInfoList-CellSyncReconfRqstTDDPRESENCE
    mandatory } |
    { ID id-SynchronisationReportType CRITICALITY reject EXTENSION SynchronisationReportType PRESENCE
    optional } |
    { ID id-SynchronisationReportCharacteristics CRITICALITY reject EXTENSION SynchronisationReportCharacteristics PRESENCE
    optional },
    ...
}

SYNCD1CodeIdMeasInfoList-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrofSyncDLCodesLCR)) OF SYNCD1CodeIdMeasInfoItem-CellSyncReconfRqstTDD

SYNCD1CodeIdMeasInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
    syncFrameNrToReceive      SyncFrameNumber,
    sYNCD1CodeIdInfoLCR      SYNCD1CodeIdInfoListLCR-CellSyncReconfRqstTDD,
    iE-Extensions            ProtocolExtensionContainer { { SYNCD1CodeIdMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

SYNCD1CodeIdMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SYNCD1CodeIdInfoListLCR-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrofReceptionsperSyncFrameLCR)) SYNCD1CodeIdInfoItemLCR-
CellSyncReconfRqstTDD )

SYNCD1CodeIdInfoItemLCR-CellSyncReconfRqstTDD ::= SEQUENCE {
    cSBMeasurementID          CSBMeasurementID,
    sYNCD1CodeId              SYNCD1CodeId,
    uARFCN                    UARFCN,

```

```

    propagationDelayCompensation      TimingAdjustmentValue      OPTIONAL,
    iE-Extensions                      ProtocolExtensionContainer { { SYNCDC1CodeIdInfoLCR-CellSyncReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

SYNCDC1CodeIdInfoLCR-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SYNCHRONISATION RECONFIGURATION RESPONSE TDD
--
-- *****

CellSynchronisationReconfigurationResponseTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSynchronisationReconfigurationResponseTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CellSynchronisationReconfigurationResponseTDD-Extensions}} OPTIONAL,
    ...
}

CellSynchronisationReconfigurationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationReconfigurationResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics          CRITICALITY      ignore          TYPE      CriticalityDiagnostics          PRESENCE optional },
    ...
}

-- *****
--
-- CELL SYNCHRONISATION RECONFIGURATION FAILURE TDD
--
-- *****

CellSynchronisationReconfigurationFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSynchronisationReconfigurationFailureTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CellSynchronisationReconfigurationFailureTDD-Extensions}} OPTIONAL,
    ...
}

CellSynchronisationReconfigurationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationReconfigurationFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-Cause                          CRITICALITY      ignore          TYPE      Cause                          PRESENCE mandatory
    } |
    { ID      id-CriticalityDiagnostics          CRITICALITY      ignore          TYPE      CriticalityDiagnostics          PRESENCE optional },
    ...
}

```

```

-- *****
--
-- CELL SYNCHRONISATION ADJUSTMENT REQUEST TDD
--
-- *****

CellSynchronisationAdjustmentRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSynchronisationAdjustmentRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSynchronisationAdjustmentRequestTDD-Extensions}}    OPTIONAL,
    ...
}

CellSynchronisationAdjustmentRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationAdjustmentRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CellAdjustmentInfo-SyncAdjustmntRqstTDD CRITICALITY ignore TYPE CellAdjustmentInfo-SyncAdjustmentRqstTDD PRESENCE mandatory },
    ...
}

CellAdjustmentInfo-SyncAdjustmentRqstTDD ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ CellAdjustmentInfoItemIE-SyncAdjustmntRqstTDD }}

CellAdjustmentInfoItemIE-SyncAdjustmntRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD CRITICALITY ignore TYPE CellAdjustmentInfoItem-SyncAdjustmentRqstTDD PRESENCE mandatory }
}

CellAdjustmentInfoItem-SyncAdjustmentRqstTDD ::= SEQUENCE {
    c-ID                C-ID,
    frameAdjustmentValue FrameAdjustmentValue    OPTIONAL,
    timingAdjustmentValue TimingAdjustmentValue    OPTIONAL,
    dlTransPower        DL-Power                OPTIONAL, -- 3.84Mcps TDD only
    sfn                 SFN                    OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer {{ CellAdjustmentInfoItem-SyncAdjustmntRqstTDD-ExtIEs}}    OPTIONAL,
    ...
}

CellAdjustmentInfoItem-SyncAdjustmntRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DwPCH-Power CRITICALITY ignore EXTENSION DwPCH-Power PRESENCE optional }, -- 1.28Mcps TDD only
    ...
}

-- *****
--
-- CELL SYNCHRONISATION ADJUSTMENT RESPONSE TDD
--
-- *****

CellSynchronisationAdjustmentResponseTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSynchronisationAdjustmentResponseTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSynchronisationAdjustmentResponseTDD-Extensions}}    OPTIONAL,

```



```

}
...
}
CellSynchronisationAdjustmentResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}
CellSynchronisationAdjustmentResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CriticalityDiagnostics          CRITICALITY  ignore      TYPE      CriticalityDiagnostics          PRESENCE optional },
  ...
}
-- *****
--
-- CELL SYNCHRONISATION ADJUSTMENT FAILURE TDD
--
-- *****

CellSynchronisationAdjustmentFailureTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{CellSynchronisationAdjustmentFailureTDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{CellSynchronisationAdjustmentFailureTDD-Extensions}}  OPTIONAL,
  ...
}

CellSynchronisationAdjustmentFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

CellSynchronisationAdjustmentFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CauseLevel-SyncAdjustmntFailureTDD  CRITICALITY  ignore      TYPE      CauseLevel-SyncAdjustmntFailureTDD  PRESENCE mandatory  }|
  { ID      id-CriticalityDiagnostics              CRITICALITY  ignore      TYPE      CriticalityDiagnostics              PRESENCE optional
  },
  ...
}

CauseLevel-SyncAdjustmntFailureTDD ::= CHOICE {
  generalCause          GeneralCauseList-SyncAdjustmntFailureTDD,
  cellSpecificCause     CellSpecificCauseList-SyncAdjustmntFailureTDD,
  ...
}

GeneralCauseList-SyncAdjustmntFailureTDD ::= SEQUENCE {
  cause                Cause,
  iE-Extensions        ProtocolExtensionContainer { { GeneralCauseList-SyncAdjustmntFailureTDD-ExtIEs } }  OPTIONAL,
  ...
}

GeneralCauseList-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

CellSpecificCauseList-SyncAdjustmntFailureTDD ::= SEQUENCE {
  unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD  Unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD,

```

```

iE-Extensions          ProtocolExtensionContainer { { CellSpecificCauseList-SyncAdjustmntFailureTDD-ExtIEs } } OPTIONAL,
...
}

CellSpecificCauseList-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

Unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container
{{ Unsuccessful-cell-InformationRespItemIE-SyncAdjustmntFailureTDD }}

Unsuccessful-cell-InformationRespItemIE-SyncAdjustmntFailureTDD NBAP-PROTOCOL-IES ::= {
  { ID      id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD      CRITICALITY      ignore      TYPE      Unsuccessful-
cell-InformationRespItem-SyncAdjustmntFailureTDD      PRESENCE      mandatory},
  ...
}

Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD ::= SEQUENCE {
  c-ID          C-ID,
  cause        Cause,
  iE-Extensions ProtocolExtensionContainer { { Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD-
ExtIEs } } OPTIONAL,
  ...
}

Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- CELL SYNCHRONISATION TERMINATION REQUEST TDD
--
-- *****

CellSynchronisationTerminationRequestTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container      {{CellSynchronisationTerminationRequestTDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{CellSynchronisationTerminationRequestTDD-Extensions}} OPTIONAL,
  ...
}

CellSynchronisationTerminationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

CellSynchronisationTerminationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-C-ID          CRITICALITY      ignore      TYPE      C-ID          PRESENCE      mandatory }|
  { ID      id-CSBTransmissionID      CRITICALITY      ignore      TYPE      CSBTransmissionID      PRESENCE      optional }|
  { ID      id-CSBMeasurementID      CRITICALITY      ignore      TYPE      CSBMeasurementID      PRESENCE      optional }|
  ...
}

-- *****

```

```

--
-- CELL SYNCHRONISATION FAILURE INDICATION TDD
--
-- *****

CellSynchronisationFailureIndicationTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container   {{CellSynchronisationFailureIndicationTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSynchronisationFailureIndicationTDD-Extensions}}    OPTIONAL,
    ...
}

CellSynchronisationFailureIndicationTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationFailureIndicationTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID                CRITICALITY ignore      TYPE      C-ID                PRESENCE mandatory }|
    { ID      id-CSBTransmissionID   CRITICALITY ignore      TYPE      CSBTransmissionID    PRESENCE optional  }|
    { ID      id-CSBMeasurementID    CRITICALITY ignore      TYPE      CSBMeasurementID     PRESENCE optional  }|
    { ID      id-Cause                CRITICALITY ignore      TYPE      Cause                PRESENCE mandatory }|
    ...
}

-- *****
--
-- CELL SYNCHRONISATION REPORT TDD
--
-- *****

CellSynchronisationReportTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container   {{CellSynchronisationReportTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSynchronisationReportTDD-Extensions}}    OPTIONAL,
    ...
}

CellSynchronisationReportTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationReportTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CellSyncInfo-CellSyncReprtTDD    CRITICALITY ignore      TYPE      CellSyncInfo-CellSyncReprtTDD    PRESENCE mandatory },
    ...
}

CellSyncInfo-CellSyncReprtTDD ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ CellSyncInfoItemIE-CellSyncReprtTDD }}

CellSyncInfoItemIE-CellSyncReprtTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID                CRITICALITY ignore      TYPE      C-ID                PRESENCE mandatory }|
    { ID      id-SyncReportType-CellSyncReprtTDD  CRITICALITY ignore      TYPE      SyncReportType-CellSyncReprtTDD  PRESENCE optional },
    ...
}

```

```

SyncReportType-CellSyncReprtTDD ::= CHOICE {
    intStdPhSyncInfo-CellSyncReprtTDD    IntStdPhCellSyncInfo-CellSyncReprtTDD,
    lateEntrantCell                       NULL,
    frequencyAcquisition                 NULL,
    ...
}

IntStdPhCellSyncInfo-CellSyncReprtTDD ::= SEQUENCE {
    cellSyncBurstMeasuredInfo            CellSyncBurstMeasInfoList-CellSyncReprtTDD,
    iE-Extensions                        ProtocolExtensionContainer { { IntStdPhCellSyncInfoList-CellSyncReprtTDD-ExtIEs } } OPTIONAL,
    ...
}

IntStdPhCellSyncInfoList-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-AccumulatedClockupdate-CellSyncReprtTDD    CRITICALITY ignore EXTENSION    TimingAdjustmentValue    PRESENCE optional } |
    { ID id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD CRITICALITY ignore EXTENSION    SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD    PRESENCE optional }, -- Mandatory for 1.28Mcps TDD only
    ...
}

CellSyncBurstMeasInfoList-CellSyncReprtTDD ::= SEQUENCE (SIZE (0..maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-CellSyncReprtTDD --
Mandatory for 3.84Mcps TDD only

CellSyncBurstMeasInfoItem-CellSyncReprtTDD ::= SEQUENCE {
    sFN                                   SFN,
    cellSyncBurstInfo-CellSyncReprtTDD    SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfo-CellSyncReprtTDD,
    ...
}

CellSyncBurstInfo-CellSyncReprtTDD ::= CHOICE {
    cellSyncBurstAvailable                CellSyncBurstAvailable-CellSyncReprtTDD,
    cellSyncBurstNotAvailable            NULL,
    ...
}

CellSyncBurstAvailable-CellSyncReprtTDD ::= SEQUENCE {
    cellSyncBurstTiming                  CellSyncBurstTiming,
    cellSyncBurstSIR                     CellSyncBurstSIR,
    ...
}

SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD ::= SEQUENCE (SIZE (0..maxNoOfSyncFramesLCR)) OF SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD
-- Mandatory for 1.28Mcps TDD only

SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD ::= SEQUENCE {
    sFN                                   SFN,
    syncDLCodeIdInfo-CellSyncReprtTDD    SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrameLCR)) OF syncDLCodeIdInfo-CellSyncReprtTDD,
    iE-Extensions                        ProtocolExtensionContainer { { SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD-ExtIEs } } OPTIONAL,
    ...
}

SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
syncDLCodeIdInfo-CellSyncReprtTDD ::= CHOICE {
    syncDLCodeIdAvailable          SyncDLCodeIdAvailable-CellSyncReprtTDD,
    syncDLCodeIDNotAvailable       NULL,
    ...
}

SynCodeIdAvailable-CellSyncReprtTDD ::= SEQUENCE {
    syncDLCodeIdTiming             CellSyncBurstTiming,
    syncDLCodeIdSIR                CellSyncBurstSIR,
    iE-Extensions                  ProtocolExtensionContainer { { SynCodeIdAvailable-CellSyncReprtTDD-ExtIEs } } OPTIONAL,
    ...
}

SynCodeIdAvailable-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- BEARER REARRANGEMENT INDICATION
--
-- *****

BearerRearrangementIndication ::= SEQUENCE {
    protocolIEs                    ProtocolIE-Container    {{BearerRearrangementIndication-IEs}},
    protocolExtensions              ProtocolExtensionContainer {{BearerRearrangementIndication-Extensions}} OPTIONAL,
    ...
}

BearerRearrangementIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore TYPE CRNC-CommunicationContextID
      PRESENCE mandatory } |
    { ID id-SignallingBearerRequestIndicator     CRITICALITY ignore TYPE SignallingBearerRequestIndicator
      PRESENCE optional } |
    { ID id-DCH-RearrangeList-Bearer-RearrangeInd CRITICALITY ignore TYPE DCH-RearrangeList-Bearer-
      RearrangeInd PRESENCE optional } |
    { ID id-DSCH-RearrangeList-Bearer-RearrangeInd CRITICALITY ignore TYPE DSCH-RearrangeList-Bearer-
      RearrangeInd PRESENCE optional } |
    { ID id-USCH-RearrangeList-Bearer-RearrangeInd CRITICALITY ignore TYPE USCH-RearrangeList-Bearer-
      RearrangeInd PRESENCE optional } |
    { ID id-TFCI2BearerRequestIndicator          CRITICALITY ignore TYPE TFCI2BearerRequestIndicator
      PRESENCE optional },
    ...
}

BearerRearrangementIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-RearrangeItem-Bearer-RearrangeInd

```

```

DCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
    dCH-ID
    iE-Extensions
    ...
    ProtocolExtensionContainer { { DCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs } } OPTIONAL,
}

DCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-RearrangeItem-Bearer-RearrangeInd

DSCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
    dSCH-ID
    iE-Extensions
    ...
    ProtocolExtensionContainer { { DSCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs } } OPTIONAL,
}

DSCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-RearrangeItem-Bearer-RearrangeInd

USCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
    uSCH-ID
    iE-Extensions
    ...
    ProtocolExtensionContainer { { USCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs } } OPTIONAL,
}

USCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK ACTIVATION COMMAND FDD
--
-- *****

RadioLinkActivationCommandFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container   {{RadioLinkActivationCommandFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkActivationCommandFDD-Extensions}}
    ...
}

RadioLinkActivationCommandFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY reject TYPE NodeB-CommunicationContextID
    PRESENCE mandatory }|
    { ID id-DelayedActivationList-RL-ActivationCmdFDD CRITICALITY reject TYPE DelayedActivationInformationList-RL-ActivationCmdFDD
    PRESENCE mandatory },
    ...
}

```

```

RadioLinkActivationCommandFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DelayedActivationInformationList-RL-ActivationCmdFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {
    { DelayedActivationInformation-RL-ActivationCmdFDD-IEs } }

DelayedActivationInformation-RL-ActivationCmdFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-DelayedActivationInformation-RL-ActivationCmdFDD    CRITICALITY reject    TYPE DelayedActivationInformation-RL-ActivationCmdFDD    PRESENCE
optional    }
}

DelayedActivationInformation-RL-ActivationCmdFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    delayed-activation-update    DelayedActivationUpdate,
    iE-Extensions        ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs } } OPTIONAL,
    ...
}

DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK ACTIVATION COMMAND TDD
--
-- *****

RadioLinkActivationCommandTDD ::= SEQUENCE {
    protocolIEs        ProtocolIE-Container    {{RadioLinkActivationCommandTDD-IEs}},
    protocolExtensions    ProtocolExtensionContainer    {{RadioLinkActivationCommandTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkActivationCommandTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-NodeB-CommunicationContextID                CRITICALITY reject    TYPE    NodeB-CommunicationContextID
PRESENCE    mandatory    } |
    { ID    id-DelayedActivationInformationList-RL-ActivationCmdTDD    CRITICALITY reject    TYPE    DelayedActivationInformationList-RL-ActivationCmdTDD
PRESENCE    mandatory    },
    ...
}

RadioLinkActivationCommandTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DelayedActivationInformationList-RL-ActivationCmdTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {
    { DelayedActivationInformation-RL-ActivationCmdTDD-IEs } }

```

```

DelayedActivationInformation-RL-ActivationCmdTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-DelayedActivationInformation-RL-ActivationCmdTDD    CRITICALITY reject  TYPE DelayedActivationInformation-RL-ActivationCmdTDD  PRESENCE
optional    }
}

DelayedActivationInformation-RL-ActivationCmdTDD ::= SEQUENCE {
  rL-ID                RL-ID,
  delayed-activation-update  DelayedActivationUpdate,
  iE-Extensions        ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs } } OPTIONAL,
  ...
}

DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

END

```

9.3.4 Information Elements Definitions

```

--*****
--
-- Information Element Definitions
--
--*****

```

```

NBAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-IEs (2) }

```

```

DEFINITIONS AUTOMATIC TAGS ::=
BEGIN

```

```

IMPORTS
  maxNrOfRLs,
  maxNrOfTFCs,
  maxNrOfErrors,
  maxCTFC,
  maxNrOfTFs,
  maxTTL-count,
  maxRateMatching,
  maxCodeNrComp-1,
  maxNrOfCellSyncBursts,
  maxNrOfCodeGroups,
  maxNrOfMeasNCell,
  maxNrOfMeasNCell-1,
  maxNrOfReceptsPerSyncFrame,
  maxNrOfTFCIGroups,
  maxNrOfTFCI1Combs,
  maxNrOfTFCI2Combs,

```



```
maxNrOfTFCI2Combs-1,
maxNrOfSF,
maxTGPS,
maxNrOfUSCHs,
maxNrOfULTSs,
maxNrOfULTSLCRs,
maxNrOfDPCHs,
maxNrOfDPCHLCRs,
maxNrOfCodes,
maxNrOfDSCHs,
maxNrOfDLTSs,
maxNrOfDLTSLCRs,
maxNrOfDCHs,
maxNrOfLevels,
maxNoGPSItems,
maxNoSat,
maxNrOfHSSCCHs,
maxNrOfHSSCCHCodes,
maxNrOfMACdFlows,
maxNrOfMACdFlows-1,
maxNrOfMACdPDUIndexes,
maxNrOfMACdPDUIndexes-1,
maxNrOfPriorityQueues,
maxNrOfPriorityQueues-1,
maxNrOfHARQProcesses,

id-MessageStructure,
id-ReportCharacteristicsType-OnModification,
id-Rx-Timing-Deviation-Value-LCR,
id-SFNsFNMeasurementValueInformation,
id-SFNsFNMeasurementThresholdInformation,
id-TUTRANGPSMeasurementValueInformation,
id-TUTRANGPSMeasurementThresholdInformation,
id-TypeOfError,
id-transportlayeraddress,
id-bindingID
FROM NBAP-Constants

Criticality,
ProcedureID,
ProtocolIE-ID,
TransactionID,
TriggeringMessage
FROM NBAP-CommonDataTypes

NBAP-PROTOCOL-IES,
ProtocolExtensionContainer{},
ProtocolIE-Single-Container{},
NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers;
```

```
-- =====
-- A
```

-- =====

Acknowledged-PCPCH-access-preambles ::= INTEGER (0..15,...)

-- According to mapping in [22].

Acknowledged-PRACH-preambles-Value ::= INTEGER(0..240,...)

-- According to mapping in [22].The number of L1 acknowledged random access tries per every 20 ms period.

```
AddorDeleteIndicator ::= ENUMERATED {
    add,
    delete
}
```

```
Active-Pattern-Sequence-Information ::= SEQUENCE {
    cmConfigurationChangeCFN          CFN,
    transmission-Gap-Pattern-Sequence-Status  Transmission-Gap-Pattern-Sequence-Status-List  OPTIONAL,
    iE-Extensions                      ProtocolExtensionContainer { {Active-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
    ...
}
```

```
Active-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
Transmission-Gap-Pattern-Sequence-Status-List ::= SEQUENCE (SIZE (0..maxTGPS)) OF
    SEQUENCE {
        tGPSID          TGPSID,
        tGPRC           TGPRC,
        tGCFN           CFN,
        iE-Extensions  ProtocolExtensionContainer { { Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs } } OPTIONAL,
        ...
    }
}
```

```
Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
AICH-Power ::= INTEGER (-22..5)
-- Offset in dB.
```

```
AICH-TransmissionTiming ::= ENUMERATED {
    v0,
    v1
}
```

```
AllocationRetentionPriority ::= SEQUENCE {
    priorityLevel          PriorityLevel,
    pre-emptionCapability  Pre-emptionCapability,
    pre-emptionVulnerability  Pre-emptionVulnerability,
    iE-Extensions          ProtocolExtensionContainer { {AllocationRetentionPriority-ExtIEs} } OPTIONAL,
    ...
}
```

```

AllocationRetentionPriority-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Angle-Of-Arrival-Value-LCR ::= SEQUENCE OF {
    aOA-LCR AOA-LCR,
    aOA-LCR-Accuracy-Class AOA-LCR-Accuracy-Class,
    iE-Extensions ProtocolExtensionContainer { {Angle-Of-Arrival-Value-LCR-ExtIEs} } OPTIONAL,
    ...
}

Angle-Of-Arrival-Value-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AOA-LCR ::= INTEGER (0..719)
-- Angle Of Arrival for 1.28Mcps TDD

AOA-LCR-Accuracy-Class ::= ENUMERATED {a,b,c,d,e,f,g,h,...}

APPreambleSignature ::= INTEGER (0..15)

APSubChannelNumber ::= INTEGER (0..11)

AvailabilityStatus ::= ENUMERATED {
    empty,
    in-test,
    failed,
    power-off,
    off-line,
    off-duty,
    dependency,
    degraded,
    not-installed,
    log-full,
    ...
}

-- =====
-- B
-- =====

BCCH-ModificationTime ::= INTEGER (0..511)
-- Time = BCCH-ModificationTime * 8
-- Range 0 to 4088, step 8
-- All SFN values in which MIB may be mapped are allowed

BindingID ::= OCTET STRING (SIZE (1..4, ...))
--If the Binding ID includes a UDP port, the UDP port is included in octet 1 and 2.The first octet of
the UDP port field is included in the first octet of the the Binding ID.

BetaCD ::= INTEGER (0..15)

```

```
BLER ::= INTEGER (-63..0)
-- Step 0.1 (Range -6.3..0). It is the Log10 of the BLER

BlockingPriorityIndicator ::= ENUMERATED {
    high,
    normal,
    low,
    ...
}
-- High priority: Block resource immediately.
-- Normal priority: Block resource when idle or upon timer expiry.
-- Low priority: Block resource when idle.

SCTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

-- =====
-- C
-- =====

Cause ::= CHOICE {
    radioNetwork          CauseRadioNetwork,
    transport             CauseTransport,
    protocol              CauseProtocol,
    misc                  CauseMisc,
    ...
}

CauseMisc ::= ENUMERATED {
    control-processing-overload,
    hardware-failure,
    oam-intervention,
    not-enough-user-plane-processing-resources,
    unspecified,
    ...
}

CauseProtocol ::= ENUMERATED {
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified,
    abstract-syntax-error-falsely-constructed-message,
    ...
}

CauseRadioNetwork ::= ENUMERATED {
    unknown-C-ID,
    cell-not-available,
```

```
power-level-not-supported,  
dl-radio-resources-not-available,  
ul-radio-resources-not-available,  
rl-already-ActivatedOrAlllocated,  
nodeB-Resources-unavailable,  
measurement-not-supported-for-the-object,  
combining-resources-not-available,  
requested-configuration-not-supported,  
synchronisation-failure,  
priority-transport-channel-established,  
sIB-Origination-in-Node-B-not-Supported,  
requested-tx-diversity-mode-not-supported,  
unspecified,  
bCCH-scheduling-error,  
measurement-temporarily-not-available,  
invalid-CM-settings,  
reconfiguration-CFN-not-elapsed,  
number-of-DL-codes-not-supported,  
s-cipch-not-supported,  
combining-not-supported,  
ul-sf-not-supported,  
dl-SF-not-supported,  
common-transport-channel-type-not-supported,  
dedicated-transport-channel-type-not-supported,  
downlink-shared-channel-type-not-supported,  
uplink-shared-channel-type-not-supported,  
cm-not-supported,  
tx-diversity-no-longer-supported,  
unknown-Local-Cell-ID,  
...,  
number-of-UL-codes-not-supported,  
information-temporarily-not-available,  
information-provision-not-supported-for-the-object,  
cell-synchronisation-not-supported,  
cell-synchronisation-adjustment-not-supported,  
dpc-mode-change-not-supported,  
iPDL-already-activated,  
iPDL-not-supported,  
iPDL-parameters-not-available,  
frequency-acquisition-not-supported,  
power-balancing-status-not-compatible,  
requested-typeofbearer-re-arrangement-not-supported,  
signalling-Bearer-Re-arrangement-not-supported,  
bearer-Re-arrangement-needed,  
delayed-activation-not-supported,  
rl-timing-adjustment-not-supported  
}  
  
CauseTransport ::= ENUMERATED {  
    transport-resource-unavailable,  
    unspecified,  
    ...  
}
```

```
CCTrCH-ID ::= INTEGER (0..15)

CDSubChannelNumbers ::= BIT STRING {
    subCh11(0),
    subCh10(1),
    subCh9(2),
    subCh8(3),
    subCh7(4),
    subCh6(5),
    subCh5(6),
    subCh4(7),
    subCh3(8),
    subCh2(9),
    subCh1(10),
    subCh0(11)
} (SIZE (12))

CellParameterID ::= INTEGER (0..127,...)

CellSyncBurstAvailabilityIndicator ::= ENUMERATED {
    cellSyncBurstAvailable,
    cellSyncBurstNotAvailable
}

CellSyncBurstCode ::= INTEGER(0..7, ...)

CellSyncBurstCodeShift ::= INTEGER(0..7)

CellSyncBurstRepetitionPeriod ::= INTEGER (0..4095)

CellSyncBurstSIR ::= INTEGER (0..31)

CellSyncBurstTiming ::= CHOICE {
    initialPhase      INTEGER (0..1048575),
    steadyStatePhase  INTEGER (0..255)
}

CellSyncBurstTimingThreshold ::= INTEGER(0..254)

CFN ::= INTEGER (0..255)

Channel-Assignment-Indication ::= ENUMERATED {
    cA-Active,
    cA-Inactive
}

ChipOffset ::= INTEGER (0..38399)
-- Unit Chip

C-ID ::= INTEGER (0..65535)

Closedlooptimingadjustmentmode ::= ENUMERATED {
```

```

adj-1-slot,
adj-2-slot,
...
}

CommonChannelsCapacityConsumptionLaw ::= SEQUENCE (SIZE(1..maxNrOfSF)) OF
SEQUENCE {
dl-Cost      INTEGER (0..65535),
ul-Cost      INTEGER (0..65535),
iE-Extensions ProtocolExtensionContainer { { CommonChannelsCapacityConsumptionLaw-ExtIEs } } OPTIONAL,
...
}

CommonChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

CommonMeasurementAccuracy ::= CHOICE {
tUTRANGPSMeasurementAccuracyClass TUTRANGPSAccuracyClass,
...
}

CommonMeasurementType ::= ENUMERATED {
received-total-wide-band-power,
transmitted-carrier-power,
acknowledged-prach-preambles,
ul-timeslot-iscp,
acknowledged-PCPCH-access-preambles,
detected-PCPCH-access-preambles,
...,
uTRAN-GPS-Timing-of-Cell-Frames-for-LCSUE-Positioning,
sFN-SFN-Observed-Time-Difference
}

CommonMeasurementValue ::= CHOICE {
transmitted-carrier-power      Transmitted-Carrier-Power-Value,
received-total-wide-band-power Received-total-wide-band-power-Value,
acknowledged-prach-preambles   Acknowledged-PRACH-preambles-Value,
uL-TimeslotISCP                UL-TimeslotISCP-Value,
acknowledged-PCPCH-access-preambles Acknowledged-PCPCH-access-preambles,
detected-PCPCH-access-preambles Detected-PCPCH-access-preambles,
...,
extension-CommonMeasurementValue Extension-CommonMeasurementValue
}

Extension-CommonMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementValueIE }}

Extension-CommonMeasurementValueIE NBAP-PROTOCOL-IES ::= {
{ ID id-TUTRANGPSMeasurementValueInformation CRITICALITY ignore TYPE TUTRANGPSMeasurementValueInformation PRESENCE mandatory }|
{ ID id-SFN-SFNMeasurementValueInformation CRITICALITY ignore TYPE SFN-SFNMeasurementValueInformation PRESENCE mandatory }
}

CommonMeasurementValueInformation ::= CHOICE {

```

```

    measurementAvailable      CommonMeasurementAvailable,
    measurementnotAvailable   CommonMeasurementnotAvailable
}

CommonMeasurementAvailable ::= SEQUENCE {
    commonmeasurementValue    CommonMeasurementValue,
    ie-Extensions             ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs} } OPTIONAL,
    ...
}

CommonMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonMeasurementnotAvailable ::= NULL

CommonPhysicalChannelID ::= INTEGER (0..255)

Common-PhysicalChannel-Status-Information ::= SEQUENCE {
    commonPhysicalChannelID   CommonPhysicalChannelID,
    resourceOperationalState  ResourceOperationalState,
    availabilityStatus        AvailabilityStatus,
    iE-Extensions             ProtocolExtensionContainer { { Common-PhysicalChannel-Status-Information-ExtIEs} } OPTIONAL,
    ...
}

Common-PhysicalChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonTransportChannelID ::= INTEGER (0..255)

CommonTransportChannel-InformationResponse ::= SEQUENCE {
    commonTransportChannelID  CommonTransportChannelID,
    bindingID                 BindingID OPTIONAL,
    transportLayerAddress     TransportLayerAddress OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { CommonTransportChannel-InformationResponse-ExtIEs} } OPTIONAL,
    ...
}

CommonTransportChannel-InformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Common-TransportChannel-Status-Information ::= SEQUENCE {
    commonTransportChannelID  CommonTransportChannelID,
    resourceOperationalState  ResourceOperationalState,
    availabilityStatus        AvailabilityStatus,
    iE-Extensions             ProtocolExtensionContainer { { Common-TransportChannel-Status-Information-ExtIEs} } OPTIONAL,
    ...
}

Common-TransportChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

}

CommunicationControlPortID ::= INTEGER (0..65535)

Compressed-Mode-Deactivation-Flag ::= ENUMERATED {
    deactivate,
    maintain-Active
}
-- on-deactivate

ConfigurationGenerationID ::= INTEGER (0..255)
-- Value '0' means "No configuration"

ConstantValue ::= INTEGER (-10..10,...)
-- -10 dB - +10 dB
-- unit dB
-- step 1 dB

CPCH-Allowed-Total-Rate ::= ENUMERATED {
    v15,
    v30,
    v60,
    v120,
    v240,
    v480,
    v960,
    v1920,
    v2880,
    v3840,
    v4800,
    v5760,
    ...
}

CPCHScramblingCodeNumber ::= INTEGER (0..79)

CPCH-UL-DPCCH-SlotFormat ::= INTEGER (0..2,...)

CriticalityDiagnostics ::= SEQUENCE {
    procedureID          ProcedureID          OPTIONAL,
    triggeringMessage    TriggeringMessage    OPTIONAL,
    procedureCriticality Criticality          OPTIONAL,
    transactionID       TransactionID        OPTIONAL,
    iEsCriticalityDiagnostics CriticalityDiagnostics-IE-List OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} } OPTIONAL,
    ...
}

CriticalityDiagnostics-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF

```

```

SEQUENCE {
  iECriticality      Criticality,
  iE-ID             ProtocolIE-ID,
  repetitionNumber  RepetitionNumber0      OPTIONAL,
  iE-Extensions     ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} } OPTIONAL,
  ...
}

```

```

CriticalityDiagnostics-IE-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-MessageStructure      CRITICALITY ignore      EXTENSION MessageStructure      PRESENCE optional      } |
  { ID id-TypeOfError          CRITICALITY ignore      EXTENSION TypeOfError          PRESENCE mandatory    } },
  ...
}

```

```

MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
  SEQUENCE {
    iE-ID             ProtocolIE-ID,
    repetitionNumber  RepetitionNumber1      OPTIONAL,
    iE-Extensions     ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
    ...
  }

```

```

MessageStructure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

CRNC-CommunicationContextID ::= INTEGER (0..1048575)

CSBMeasurementID ::= INTEGER (0..65535)

CSBTransmissionID ::= INTEGER (0..65535)

```

-- =====
-- D
-- =====

```

DATA-ID ::= INTEGER (0..3)

DCH-ID ::= INTEGER (0..255)

DCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-FDD-InformationItem

```

DCH-FDD-InformationItem ::= SEQUENCE {
  payloadCRC-PresenceIndicator  PayloadCRC-PresenceIndicator,
  ul-FP-Mode                    UL-FP-Mode,
  toAWS                          ToAWS,
  toAWE                          ToAWE,
  dch-SpecificInformationList    DCH-Specific-FDD-InformationList,
  iE-Extensions                 ProtocolExtensionContainer { { DCH-FDD-InformationItem-ExtIEs } } OPTIONAL,
  ...
}

```

```
DCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
DCH-Specific-FDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-FDD-Item
```

```
DCH-Specific-FDD-Item ::= SEQUENCE {
  dCH-ID                DCH-ID,
  ul-TransportFormatSet TransportFormatSet,
  dl-TransportFormatSet TransportFormatSet,
  allocationRetentionPriority AllocationRetentionPriority,
  frameHandlingPriority  FrameHandlingPriority,
  qE-Selector            QE-Selector,
  iE-Extensions         ProtocolExtensionContainer { { DCH-Specific-FDD-Item-ExtIEs } } OPTIONAL,
  ...
}
```

```
DCH-Specific-FDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
DCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem
```

```
DCH-InformationResponseItem ::= SEQUENCE {
  dCH-ID                DCH-ID,
  bindingID             BindingID OPTIONAL,
  transportLayerAddress TransportLayerAddress OPTIONAL,
  iE-Extensions         ProtocolExtensionContainer { { DCH-InformationResponseItem-ExtIEs } } OPTIONAL,
  ...
}
```

```
DCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
DCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-TDD-InformationItem
```

```
DCH-TDD-InformationItem ::= SEQUENCE {
  payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
  ul-FP-Mode                   UL-FP-Mode,
  toAWS                         ToAWS,
  toAWE                         ToAWE,
  dCH-SpecificInformationList   DCH-Specific-TDD-InformationList,
  iE-Extensions                 ProtocolExtensionContainer { { DCH-TDD-InformationItem-ExtIEs } } OPTIONAL,
  ...
}
```

```
DCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
DCH-Specific-TDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-TDD-Item
```

```

DCH-Specific-TDD-Item ::= SEQUENCE {
    dCH-ID                DCH-ID,
    ul-CCTrCH-ID         CCTrCH-ID,
    dl-CCTrCH-ID         CCTrCH-ID,
    ul-TransportFormatSet TransportFormatSet,
    dl-TransportFormatSet TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority FrameHandlingPriority,
    qE-Selector          QE-Selector OPTIONAL,
    -- This IE shall be present if DCH is part of set of Coordinated DCHs
    iE-Extensions        ProtocolExtensionContainer { { DCH-Specific-TDD-Item-ExtIEs } } OPTIONAL,
    ...
}

DCH-Specific-TDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifyItem

FDD-DCHs-to-ModifyItem ::= SEQUENCE {
    ul-FP-Mode           UL-FP-Mode OPTIONAL,
    toAWS                ToAWS      OPTIONAL,
    toAWE                ToAWE      OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    dCH-SpecificInformationList DCH-ModifySpecificInformation-FDD,
    iE-Extensions        ProtocolExtensionContainer { { FDD-DCHs-to-ModifyItem-ExtIEs } } OPTIONAL,
    ...
}

FDD-DCHs-to-ModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifySpecificInformation-FDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-FDD

DCH-ModifySpecificItem-FDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    ul-TransportFormatSet TransportFormatSet OPTIONAL,
    dl-TransportFormatSet TransportFormatSet OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority FrameHandlingPriority OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { DCH-ModifySpecificItem-FDD-ExtIEs } } OPTIONAL,
    ...
}

DCH-ModifySpecificItem-FDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifyItem-TDD

```

```

DCH-ModifyItem-TDD ::= SEQUENCE {
    ul-FP-Mode          UL-FP-Mode          OPTIONAL,
    toAWS              ToAWS              OPTIONAL,
    toAWE              ToAWE              OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    dCH-SpecificInformationList DCH-ModifySpecificInformation-TDD,
    iE-Extensions      ProtocolExtensionContainer { { TDD-DCHs-to-ModifyItem-ExtIEs } } OPTIONAL,
    ...
}

TDD-DCHs-to-ModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifySpecificInformation-TDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-TDD

DCH-ModifySpecificItem-TDD ::= SEQUENCE {
    dCH-ID              DCH-ID,
    ul-CCTrCH-ID       CCTrCH-ID          OPTIONAL,
    dl-CCTrCH-ID       CCTrCH-ID          OPTIONAL,
    ul-TransportFormatSet TransportFormatSet OPTIONAL,
    dl-TransportFormatSet TransportFormatSet OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority FrameHandlingPriority OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { { DCH-ModifySpecificItem-TDD-ExtIEs } } OPTIONAL,
    ...
}

DCH-ModifySpecificItem-TDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedChannelsCapacityConsumptionLaw ::= SEQUENCE ( SIZE(1..maxNrOfSF) ) OF
SEQUENCE {
    dl-Cost-1          INTEGER (0..65535),
    dl-Cost-2          INTEGER (0..65535),
    ul-Cost-1          INTEGER (0..65535),
    ul-Cost-2          INTEGER (0..65535),
    iE-Extensions      ProtocolExtensionContainer { { DedicatedChannelsCapacityConsumptionLaw-ExtIEs } } OPTIONAL,
    ...
}

DedicatedChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementType ::= ENUMERATED {
    sir,
    sir-error,
    transmitted-code-power,
    rscp,
    rx-timing-deviation,
    round-trip-time,
}

```

```

    ...,
    rx-timing-deviation-LCR,
    angle-Of-Arrival-LCR,
}

DedicatedMeasurementValue ::= CHOICE {
    sIR-Value                SIR-Value,
    sIR-ErrorValue           SIR-Error-Value,
    transmittedCodePowerValue Transmitted-Code-Power-Value,
    rSCP                     RSCP-Value,
    rxTimingDeviationValue   Rx-Timing-Deviation-Value,
    roundTripTime            Round-Trip-Time-Value,
    ...,
    extension-DedicatedMeasurementValue Extension-DedicatedMeasurementValue
}

Extension-DedicatedMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-DedicatedMeasurementValueIE }}

Extension-DedicatedMeasurementValueIE NBAP-PROTOCOL-IES ::= {
    { ID id-Rx-Timing-Deviation-Value-LCR CRITICALITY reject TYPE Rx-Timing-Deviation-Value-LCR PRESENCE mandatory } |
    { ID id-Angle-Of-Arrival-Value-LCR CRITICALITY reject EXTENSION Angle-Of-Arrival-Value-LCR PRESENCE mandatory },
    ...
}

DedicatedMeasurementValueInformation ::= CHOICE {
    measurementAvailable        DedicatedMeasurementAvailable,
    measurementnotAvailable     DedicatedMeasurementnotAvailable
}

DedicatedMeasurementAvailable ::= SEQUENCE {
    dedicatedmeasurementValue    DedicatedMeasurementValue,
    cFN                          CFN OPTIONAL,
    ie-Extensions                ProtocolExtensionContainer { { DedicatedMeasurementAvailableItem-ExtIEs } } OPTIONAL,
    ...
}

DedicatedMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementnotAvailable ::= NULL

DelayedActivation ::= CHOICE {
    cfn                          CFN,
    separate-indication          NULL
}

DelayedActivationUpdate ::= CHOICE {
    activate                     Activate-Info,
    deactivate                   Deactivate-Info
}

Activate-Info ::= SEQUENCE {

```

```

activation-type      Execution-Type,
initial-dl-tx-power  DL-Power,
firstRLS-Indicator   FirstRLS-Indicator
propagation-delay    PropagationDelay
iE-Extensions        ProtocolExtensionContainer { { Activate-Info-ExtIEs} }
...
}

Activate-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

Deactivate-Info ::= SEQUENCE {
deactivation-type    Execution-Type,
iE-Extensions        ProtocolExtensionContainer { { Deactivate-Info-ExtIEs} }
...
}

Deactivate-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

Execution-Type ::= CHOICE {
synchronised        CFN,
unsynchronised      NULL
}

Detected-PCPCH-access-preambles ::= INTEGER (0..240,...)
-- According to mapping in [22].

DeltaSIR             ::= INTEGER (0..30)
-- Unit dB, Step 0.1 dB, Range 0..3 dB.

DGPSCorrections ::= SEQUENCE {
gpstow              GPSTOW,
status-health       GPS-Status-Health,
satelliteinfo       SAT-Info-DGPSCorrections,
ie-Extensions        ProtocolExtensionContainer { { DGPSCorrections-ExtIEs} }
...
}

DGPSCorrections-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DGPSThresholds ::= SEQUENCE {
prcdeviation        PRCDeviation,
ie-Extensions        ProtocolExtensionContainer { { DGPSThresholds-ExtIEs} }
...
}

DGPSThresholds-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

OPTIONAL, --FDD Only
OPTIONAL, --FDD Only
OPTIONAL,

OPTIONAL,

OPTIONAL,

OPTIONAL,

```

}

DiversityControlField ::= ENUMERATED {
    may,
    must,
    must-not,
    ...
}

DiversityMode ::= ENUMERATED {
    none,
    sTTD,
    closed-loop-mode1,
    closed-loop-mode2,
    ...
}

DL-DPCH-SlotFormat ::= INTEGER (0..16,...)

DL-DPCH-TimingAdjustment ::= ENUMERATED {
    timing-advance,
    timing-delay
}

DL-Timeslot-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationItem

DL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tFCI-Presence           TFCI-Presence,
    dL-Code-Information     TDD-DL-Code-Information,
    iE-Extensions           ProtocolExtensionContainer { { DL-Timeslot-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

DL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-TimeslotLCR-InformationItem

DL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR,
    tFCI-Presence              TFCI-Presence,
    dL-Code-LCR-Information     TDD-DL-Code-LCR-Information,
    iE-Extensions              ProtocolExtensionContainer { { DL-TimeslotLCR-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

DL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

DL-FrameType ::= ENUMERATED {
    typeA,
    typeB,
    ...
}

DL-or-Global-CapacityCredit ::= INTEGER (0..65535)

DL-Power ::= INTEGER (-350..150)
-- DL-Power = power * 10
-- If Power <=-35 DL-Power shall be set to -350
-- if Power >=15 DL-Power shall be set to 150
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB

DLPowerAveragingWindowSize ::= INTEGER (1..60)

DL-PowerBalancing-Information ::= SEQUENCE {
    powerAdjustmentType          PowerAdjustmentType,
    dlReferencePower             DL-Power          OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common'
    dlReferencePowerList-DL-PC-Rqst DL-ReferencePowerInformationList OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Individual'
    maxAdjustmentStep           MaxAdjustmentStep  OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    adjustmentPeriod            AdjustmentPeriod   OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    adjustmentRatio             ScaledAdjustmentRatio OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    iE-Extensions               ProtocolExtensionContainer { { DL-PowerBalancing-Information-ExtIEs } } OPTIONAL,
    ...
}

DL-PowerBalancing-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-ReferencePowerInformationList ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF DL-ReferencePowerInformationItem

DL-ReferencePowerInformationItem ::= SEQUENCE {
    rL-ID                       RL-ID,
    dl-Reference-Power          DL-Power,
    iE-Extensions               ProtocolExtensionContainer { {DL-ReferencePowerInformationItem-ExtIEs} } OPTIONAL,
    ...
}

DL-ReferencePowerInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-PowerBalancing-ActivationIndicator ::= ENUMERATED {
    dl-PowerBalancing-Activated
}

```

```

DL-PowerBalancing-UpdatedIndicator ::= ENUMERATED {
    dL-PowerBalancing-Updated
}

DL-ScramblingCode ::= INTEGER (0..15)
-- 0= Primary scrambling code of the cell, 1..15= Secondary scrambling code --

DL-TimeslotISCP ::= INTEGER (0..91)

DL-TimeslotISCPInfo ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-TimeslotISCPInfoItem

DL-TimeslotISCPInfoItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    dL-TimeslotISCP         DL-TimeslotISCP,
    iE-Extensions           ProtocolExtensionContainer { {DL-TimeslotISCPInfoItem-ExtIEs} } OPTIONAL,
    ...
}

DL-TimeslotISCPInfoItem-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-TimeslotISCPInfoLCR ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-TimeslotISCPInfoItemLCR

DL-TimeslotISCPInfoItemLCR ::= SEQUENCE {
    timeSlotLCR            TimeSlotLCR,
    dL-TimeslotISCP       DL-TimeslotISCP,
    iE-Extensions         ProtocolExtensionContainer { {DL-TimeslotISCPInfoItemLCR-ExtIEs} } OPTIONAL,
    ...
}

DL-TimeslotISCPInfoItemLCR-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-TPC-Pattern01Count ::= INTEGER (0..30,...)

Downlink-Compressed-Mode-Method ::= ENUMERATED {
    puncturing,
    sFdiv2,
    higher-layer-scheduling,
    ...
}

DPC-Mode ::= ENUMERATED {
    mode0,
    mode1,
    ...
}

DPCH-ID ::= INTEGER (0..239)

```

DSCH-ID ::= INTEGER (0..255)

DSCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-InformationResponseItem

```
DSCH-InformationResponseItem ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    bindingID              BindingID                OPTIONAL,
    transportLayerAddress  TransportLayerAddress    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-InformationResponseItem-ExtIEs } } OPTIONAL,
    ...
}
```

```
DSCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
DSCH-FDD-Common-Information ::= SEQUENCE {
    enhancedDSCHPCIndicator    EnhancedDSCHPCIndicator    OPTIONAL,
    enhancedDSCHPC            EnhancedDSCHPC            OPTIONAL,
    -- The IE shall be present if the Enhanced DSCH PC Indicator IE is set to "Enhanced DSCH PC Active in the UE".
    iE-Extensions              ProtocolExtensionContainer { { DSCH-FDD-Common-Information-ExtIEs } } OPTIONAL,
    ...
}
```

```
DSCH-FDD-Common-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

DSCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-FDD-InformationItem

```
DSCH-FDD-InformationItem ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    transportFormatSet     TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority  FrameHandlingPriority,
    toAWS                  ToAWS,
    toAWE                  ToAWE,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-FDD-InformationItem-ExtIEs } } OPTIONAL,
    ...
}
```

```
DSCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID          CRITICALITY ignore     EXTENSION BindingID     PRESENCE optional } |
    { ID id-transportlayeraddress CRITICALITY ignore     EXTENSION TransportLayerAddress PRESENCE optional },
    ...
}
```

DSCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-TDD-InformationItem

```
DSCH-TDD-InformationItem ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    cCTrCH-ID              CCTrCH-ID,
    transportFormatSet     TransportFormatSet,
```

```

allocationRetentionPriority      AllocationRetentionPriority,
frameHandlingPriority            FrameHandlingPriority,
toAWS                           ToAWS,
toAWE                            ToAWE,
iE-Extensions                    ProtocolExtensionContainer { { DSCH-TDD-InformationItem-ExtIEs } }      OPTIONAL,
...
}

DSCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-bindingID              CRITICALITY ignore      EXTENSION  BindingID      PRESENCE      optional }|
  { ID id-transportlayeraddress  CRITICALITY ignore      EXTENSION  TransportLayerAddress PRESENCE      optional },
  ...
}

DwPCH-Power ::= ENUMERATED {minus10, minus9, minus8, minus7, minus6, minus5, minus4, minus3, minus2, minus1, zero, plus1, plus2, plus3, plus4,
plus5, ...}

-- =====
-- E
-- =====

End-Of-Audit-Sequence-Indicator ::= INTEGER (-150..400,...)
-- DwPCH-power = power * 10
-- If power <= -15 DwPCH shall be set to -150
-- If power >= 40 DwPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB

EnhancedDSCHPC ::= SEQUENCE {
  enhancedDSCHPCWnd      EnhancedDSCHPCWnd,
  enhancedDSCHPCCounter  EnhancedDSCHPCCounter,
  enhancedDSCHPowerOffset EnhancedDSCHPowerOffset,
  ...
}

EnhancedDSCHPCCounter ::= INTEGER (1..50)

EnhancedDSCHPCIndicator ::= ENUMERATED {
  enhancedDSCHPCActiveInTheUE,
  enhancedDSCHPCNotActiveInTheUE
}

EnhancedDSCHPCWnd ::= INTEGER (1..10)

EnhancedDSCHPowerOffset ::= INTEGER (-15..0)

-- =====
-- F
-- =====

FDD-DL-ChannelisationCodeNumber ::= INTEGER(0.. 511)
-- According to the mapping in [9]. The maximum value is equal to the DL spreading factor -1--

FDD-DL-CodeInformation ::= SEQUENCE (SIZE (1..maxNrOfCodes)) OF FDD-DL-CodeInformationItem

```

```

FDD-DL-CodeInformationItem ::= SEQUENCE {
    dl-ScramblingCode                DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
    transmissionGapPatternSequenceCodeInformation  TransmissionGapPatternSequenceCodeInformation OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { FDD-DL-CodeInformationItem-ExtIEs } } OPTIONAL,
    ...
}

FDD-DL-CodeInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FDD-S-CCPCH-Offset ::= INTEGER (0..149)
-- 0: 0 chip, 1: 256 chip, 2: 512 chip, .. ,149: 38144 chip [7] --

FDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size0-5,
    step-size1,
    step-size1-5,
    step-size2,
    ...
}

FirstRLS-Indicator ::= ENUMERATED {
    first-RLS,
    not-first-RLS,
    ...
}

FNReportingIndicator ::= ENUMERATED {
    fN-reporting-required,
    fN-reporting-not-required
}

FrameHandlingPriority ::= INTEGER (0..15)
-- 0=lower priority, 15=higher priority --

FrameAdjustmentValue ::= INTEGER(0..4095)

FrameOffset ::= INTEGER (0..255)

FPACH-Power ::= INTEGER (-150..400,...) -- FPACH-power = power * 10
-- If power <= -15 FPACH shall be set to -150
-- If power >= 40 FPACH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB

-- =====
-- G
-- =====

GapLength ::= INTEGER (1..14)

```

```

-- Unit slot

GapDuration          ::= INTEGER (1..144,...)
-- Unit frame

GPS-Almanac ::= SEQUENCE {
    wna-alm          BIT STRING (SIZE (8)),
    sat-info-almanac  SAT-Info-Almanac,
    sVGlobalHealth-alm BIT STRING (SIZE (364)) OPTIONAL,
    ie-Extensions     ProtocolExtensionContainer { { GPS-Almanac-ExtIEs } }    OPTIONAL,
    ...
}

GPS-Almanac-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-Ionospheric-Model ::= SEQUENCE {
    alpha-zero-ionos   BIT STRING (SIZE (8)),
    alpha-one-ionos    BIT STRING (SIZE (8)),
    alpha-two-ionos    BIT STRING (SIZE (8)),
    alpha-three-ionos  BIT STRING (SIZE (8)),
    beta-zero-ionos    BIT STRING (SIZE (8)),
    beta-one-ionos     BIT STRING (SIZE (8)),
    beta-two-ionos     BIT STRING (SIZE (8)),
    beta-three-ionos   BIT STRING (SIZE (8)),
    ie-Extensions     ProtocolExtensionContainer { { GPS-Ionospheric-Model-ExtIEs } }    OPTIONAL,
    ...
}

GPS-Ionospheric-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-Information ::= SEQUENCE (SIZE (0..maxNoGPSItems)) OF GPS-Information-Item
-- This IE shall be present if the Information Type Item IE indicates 'GPS Information'

GPS-Information-Item ::= ENUMERATED {
    gps-navigation-model-and-time-recovery,
    gps-ionospheric-model,
    gps-utc-model,
    gps-almanac,
    gps-rt-integrity,
    ...
}

GPS-RealTime-Integrity ::= CHOICE {
    bad-satellites      GPSBadSat-Info-RealTime-Integrity,
    no-bad-satellites   NULL
}

GPSBadSat-Info-RealTime-Integrity ::= SEQUENCE {
    sat-info            SATInfo-RealTime-Integrity,

```

```

    ie-Extensions          ProtocolExtensionContainer { { GPSBadSat-Info-RealTime-Integrity-ExtIEs} } OPTIONAL,
    ...
}

GPSBadSat-Info-RealTime-Integrity-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-NavandRecovery-Item ::= SEQUENCE (SIZE (1..maxNoSat)) OF GPS-NavandRecovery-Item

GPS-NavandRecovery-Item ::= SEQUENCE {
    tx-tow-nav              INTEGER (0..1048575),
    sat-id-nav              SAT-ID,
    tlm-message-nav         BIT STRING (SIZE (14)),
    tlm-revd-c-nav          BIT STRING (SIZE (2)),
    ho-word-nav             BIT STRING (SIZE (22)),
    w-n-nav                 BIT STRING (SIZE (10)),
    ca-or-p-on-l2-nav       BIT STRING (SIZE (2)),
    user-range-accuracy-index-nav BIT STRING (SIZE (4)),
    sv-health-nav           BIT STRING (SIZE (6)),
    iodc-nav                BIT STRING (SIZE (10)),
    l2-p-dataflag-nav       BIT STRING (SIZE (1)),
    sfl-reserved-nav        BIT STRING (SIZE (87)),
    t-gd-nav                BIT STRING (SIZE (8)),
    t-oc-nav                BIT STRING (SIZE (16)),
    a-f-2-nav               BIT STRING (SIZE (8)),
    a-f-1-nav               BIT STRING (SIZE (16)),
    a-f-zero-nav            BIT STRING (SIZE (22)),
    c-rs-nav                BIT STRING (SIZE (16)),
    delta-n-nav             BIT STRING (SIZE (16)),
    m-zero-nav              BIT STRING (SIZE (32)),
    c-uc-nav                BIT STRING (SIZE (16)),
    gps-e-nav               BIT STRING (SIZE (32)),
    c-us-nav                BIT STRING (SIZE (16)),
    a-sqrt-nav              BIT STRING (SIZE (32)),
    t-oe-nav                BIT STRING (SIZE (16)),
    fit-interval-flag-nav   BIT STRING (SIZE (1)),
    aodo-nav                BIT STRING (SIZE (5)),
    c-ic-nav                BIT STRING (SIZE (16)),
    omega-zero-nav          BIT STRING (SIZE (32)),
    c-is-nav                BIT STRING (SIZE (16)),
    i-zero-nav              BIT STRING (SIZE (32)),
    c-rc-nav                BIT STRING (SIZE (16)),
    gps-omega-nav           BIT STRING (SIZE (32)),
    omegadot-nav            BIT STRING (SIZE (24)),
    idot-nav                BIT STRING (SIZE (14)),
    spare-zero-fill         BIT STRING (SIZE (20)),
    ie-Extensions          ProtocolExtensionContainer { { GPS-NavandRecovery-Item-ExtIEs} } OPTIONAL,
    ...
}

GPS-NavandRecovery-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

}

```

GPS-RX-POS ::= SEQUENCE {
    latitudeSign      ENUMERATED {north, south},
    latitude          INTEGER (0..8388607),
    longitude         INTEGER (-8388608..8388607),
    directionOfAltitude  ENUMERATED {height, depth},
    altitude          INTEGER (0..32767),
    iE-Extensions    ProtocolExtensionContainer { { GPS-RX-POS-ExtIEs } } OPTIONAL,
    ...
}

```

```

GPS-RX-POS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

GPS-Status-Health ::= ENUMERATED {
    udre-scale-1dot0,
    udre-scale-0dot75,
    udre-scale-0dot5,
    udre-scale-0dot3,
    udre-scale-0dot1,
    no-data,
    invalid-data
}

```

```

GPSTOW ::= INTEGER (0..604799)

```

```

GPS-UTC-Model ::= SEQUENCE {
    a-one-utc      BIT STRING (SIZE (24)),
    a-zero-utc     BIT STRING (SIZE (32)),
    t-ot-utc      BIT STRING (SIZE (8)),
    delta-t-ls-utc BIT STRING (SIZE (8)),
    w-n-t-utc     BIT STRING (SIZE (8)),
    w-n-lsf-utc   BIT STRING (SIZE (8)),
    dn-utc        BIT STRING (SIZE (8)),
    delta-t-lsf-utc BIT STRING (SIZE (8)),
    ie-Extensions ProtocolExtensionContainer { { GPS-UTC-Model-ExtIEs } } OPTIONAL,
    ...
}

```

```

GPS-UTC-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- =====
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-- =====

```

```

HARQMemoryPartitioningFDD ::= SEQUENCE (SIZE (1..maxNrOfHARQProcesses)) OF HARQMemoryPartitioning-ItemFDD

```

```

HARQMemoryPartitioning-ItemFDD ::= SEQUENCE {

```



```

    process-Memory-Size      INTEGER (0..172800,...),
    iE-Extensions            ProtocolExtensionContainer { { HARQMemoryPartitioning-ItemFDD-ExtIEs } } OPTIONAL,
    ...
}

HARQMemoryPartitioning-ItemFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HARQMemoryPartitioningTDD ::= SEQUENCE (SIZE (1..maxNrOfHARQProcesses)) OF HARQMemoryPartitioning-ItemTDD

HARQMemoryPartitioning-ItemTDD ::= SEQUENCE {
    process-Memory-Size      INTEGER (0..168960,...),
    iE-Extensions            ProtocolExtensionContainer { { HARQMemoryPartitioning-ItemTDD-ExtIEs } } OPTIONAL,
    ...
}

HARQMemoryPartitioning-ItemTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-FDD-Information ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-Info      HSDSCH-MACdFlow-Specific-InfoList,
    ueCapability-Info                   UE-Capability-InformationFDD,
    harqMemoryPartitioningFDD           HARQMemoryPartitioningFDD,
    measFeedbackOffset                  INTEGER (0..79,...),
    iE-Extensions                        ProtocolExtensionContainer { { HSDSCH-FDD-Information-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-FDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-TDD-Information ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-Info      HSDSCH-MACdFlow-Specific-InfoList,
    ueCapability-Info                   UE-Capability-InformationTDD,
    harqMemoryPartitioningTDD           HARQMemoryPartitioningTDD,
    iE-Extensions                        ProtocolExtensionContainer { { HSDSCH-TDD-Information-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-TDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem

HSDSCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
    hsDSCH-MACdFlow-ID                 HSDSCH-MACdFlow-ID,
    bler                                 BLER,
    allocationRetentionPriority          AllocationRetentionPriority,
    priorityQueueInfo                   PriorityQueue-InfoList,

```

```

    iE-Extensions          ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs } }    OPTIONAL,
    ...
}

HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-Information-to-Modify ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-Info-to-Modify          HSDSCH-MACdFlow-Specific-InfoList-to-Modify          OPTIONAL,
    measFeedbackRepCycleK                            ENUMERATED { measurement-Feedback-Reporting-Cycle-K1, measurement-Feedback-Reporting-Cycle-K2 }
    OPTIONAL,
    -- only for FDD
    iE-Extensions          ProtocolExtensionContainer { { HSDSCH-FDD-Information-to-Modify-ExtIEs } }    OPTIONAL,
    ...
}

HSDSCH-FDD-Information-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-MACdFlow-Specific-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-to-Modify

HSDSCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE {
    hsDSCH-MACdFlow-ID          HSDSCH-MACdFlow-ID,
    bler                        BLER                                OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority          OPTIONAL,
    priorityQueueInfoToModify   PriorityQueue-InfoList-to-Modify    OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs } }    OPTIONAL,
    ...
}

HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-FDD-Information-Response ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-InformationResp          HSDSCH-MACdFlow-Specific-InformationResp,
    hsSCCH-Specific-Information-ResponseFDD           HSSCCH-Specific-InformationRespListFDD,
    measFeedback-CycleK1                             Measurement-Feedback-Reporting-Cycle,
    measFeedback-CycleK2                             Measurement-Feedback-Reporting-Cycle,

    iE-Extensions          ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } }    OPTIONAL,
    ...
}

HSDSCH-FDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-TDD-Information-Response ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-InformationResp          HSDSCH-MACdFlow-Specific-InformationResp,
    hsSCCH-Specific-Information-ResponseTDD           HSSCCH-Specific-InformationRespListTDD
    OPTIONAL,

```

```

hsSCCH-Specific-Information-ResponseTDDLRCR      HSSCCH-Specific-InformationRespListTDDLRCR      OPTIONAL,
iE-Extensions                                     ProtocolExtensionContainer { { HSDSCH-TDD-Information-Response-ExtIEs } }      OPTIONAL,
...
}

HSDSCH-TDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

HSDSCH-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InformationResp-Item

HSDSCH-MACdFlow-Specific-InformationResp-Item ::= SEQUENCE {
hsDSCHMacdFlow-Id                               HSDSCH-MACdFlow-ID,
bindingID                                         BindingID                                         OPTIONAL,
transportLayerAddress                             TransportLayerAddress                             OPTIONAL,
iE-Extensions                                     ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs } }
OPTIONAL,
...
}

HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

HSSCCH-Specific-InformationRespListFDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Codes

HSSCCH-Codes ::= SEQUENCE {
codeNumber                                       INTEGER (1..127),
iE-Extensions                                     ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemFDD-ExtIEs } }      OPTIONAL,
...
}

HSSCCH-Specific-InformationRespItemFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

HSSCCH-Specific-InformationRespListTDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDD

HSSCCH-Specific-InformationRespItemTDD ::= SEQUENCE {
timeslot                                          TimeSlot,
midambleShiftAndBurstType                        MidambleShiftAndBurstType,
tDD-ChannelisationCode                           TDD-ChannelisationCode,
hSSICH-Info                                       HSSICH-Info,
iE-Extensions                                     ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDD-ExtIEs } }      OPTIONAL,
...
}

HSSCCH-Specific-InformationRespItemTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

HSSCCH-Specific-InformationRespListTDDLRCR ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDDLRCR

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```

HSSCCH-Specific-InformationRespItemTDDLRCR ::= SEQUENCE {
    timeslotLCR                               TimeSlotLCR,
    midambleShiftLCR                          MidambleShiftLCR,
    tDD-ChannelisationCodeLCR                 TDD-ChannelisationCodeLCR,
    hSSICH-InfoLCR                            HSSICH-InfoLCR,
    iE-Extensions                             ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDDLRCR-ExtIEs } } OPTIONAL,
    ...
}

HSSCCH-Specific-InformationRespItemTDDLRCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSICH-Info ::= SEQUENCE {
    timeslot                                   TimeSlot,
    midambleShiftAndBurstType                 MidambleShiftAndBurstType,
    tDD-ChannelisationCode                   TDD-ChannelisationCode,
    iE-Extensions                             ProtocolExtensionContainer { { HSSICH-Info-ExtIEs } } OPTIONAL,
    ...
}

HSSICH-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSICH-InfoLCR ::= SEQUENCE {
    timeslotLCR                               TimeSlotLCR,
    midambleShiftLCR                          MidambleShiftLCR,
    tDD-ChannelisationCodeLCR                 TDD-ChannelisationCodeLCR,
    iE-Extensions                             ProtocolExtensionContainer { { HSSICH-Info-LCR-ExtIEs } } OPTIONAL,
    ...
}

HSSICH-Info-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-MACdFlow-ID ::= INTEGER (0..maxNrOfMACdFlows-1)

HSDSCH-RNTI ::= INTEGER (0..65535)

HS-PDSCH-FDD-Code-Information ::= SEQUENCE {
    number-of-HS-PDSCH-codes                 INTEGER (0..maxCodeNrComp-1),
    hS-PDSCH-Start-code-number               HS-PDSCH-Start-code-number OPTIONAL,
    -- Only included when number of HS-DSCH codes > 0
    ...
}

HS-PDSCH-Start-code-number ::= INTEGER (0..maxCodeNrComp-1)

HS-SCCH-ID ::= INTEGER (0..31)

HS-SCCH-FDD-Code-Information ::= SEQUENCE {

```

```
    HS-SCCH-FDD-Code-List          HS-SCCH-FDD-Code-List          OPTIONAL,
    ...
}

HS-SCCH-FDD-Code-List ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-FDD-Code-Information-Item

HS-SCCH-FDD-Code-Information-Item ::= INTEGER (0..maxCodeNrComp-1)

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IB-OC-ID ::= INTEGER (1..16)

IB-SG-DATA ::= BIT STRING
-- Contains SIB data fixed" or "SIB data variable" in segment as encoded in ref.[18].

IB-SG-POS ::= INTEGER (0..4094)
-- Only even positions allowed

IB-SG-REP ::= ENUMERATED {rep4, rep8, rep16, rep32, rep64, rep128, rep256, rep512, rep1024, rep2048, rep4096}

IB-Type ::= ENUMERATED {
    mIB,
    sB1,
    sB2,
    sIB1,
    sIB2,
    sIB3,
    sIB4,
    sIB5,
    sIB6,
    sIB7,
    sIB8,
    sIB9,
    sIB10,
    sIB11,
    sIB12,
    sIB13,
    sIB13dot1,
    sIB13dot2,
    sIB13dot3,
    sIB13dot4,
    sIB14,
    sIB15,
    sIB15dot1,
    sIB15dot2,
    sIB15dot3,
    sIB16,
    ...,
    sIB17,
    sIB15dot4,
    sIB18
}
```

```

}

IndicationType ::= ENUMERATED {
  noFailure,
  serviceImpacting,
  ...
}

InformationReportCharacteristics ::= CHOICE {
  onDemand          NULL,
  periodic          InformationReportCharacteristicsType-ReportPeriodicity,
  onModification   InformationReportCharacteristicsType-OnModification,
  ...
}

InformationReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
  min          ReportPeriodicity-Scaledmin,
  hours       ReportPeriodicity-Scaledhour,
  ...
}

InformationReportCharacteristicsType-OnModification ::= SEQUENCE {
  information-thresholds  InformationThresholds OPTIONAL,
  ie-Extensions          ProtocolExtensionContainer { { InformationReportCharacteristicsType-OnModification-ExtIEs } } OPTIONAL,
  ...
}

InformationReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

InformationThresholds ::= CHOICE {
  dgps          DGPSThresholds,
  ...
}

InformationExchangeID ::= INTEGER (0..1048575)

InformationType ::= SEQUENCE {
  information-Type-Item  Information-Type-Item,
  gpsInformation        GPS-Information OPTIONAL,
  -- The IE shall be present if the Information Type Item IE indicates "GPS Information".
  ie-Extensions        ProtocolExtensionContainer { { Information-Type-ExtIEs } } OPTIONAL,
  ...
}

Information-Type-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Information-Type-Item ::= ENUMERATED {
  gpsinformation,
  dgpscorrections,

```

```

    gpsrxpos,
    ...
}

InnerLoopDLPCStatus ::= ENUMERATED {
    active,
    inactive
}

IPDL-Indicator ::= ENUMERATED {
    active,
    inactive
}

IPDL-FDD-Parameters ::= SEQUENCE {
    iP-SpacingFDD          ENUMERATED{sp5,sp7,sp10,sp15,sp20,sp30,sp40,sp50,...},
    iP-Length              ENUMERATED{len5, len10},
    seed                   INTEGER(1..63),
    burstModeParams        BurstModeParams      OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { IPDLFDDParameter-ExtIEs} } OPTIONAL,
    ...
}

IPDLFDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IPDL-TDD-Parameters ::= SEQUENCE {
    iP-SpacingTDD          ENUMERATED{sp30,sp40,sp50,sp70,sp100,...},
    iP-Start               INTEGER(0..4095),
    iP-Slot                INTEGER(0..14),
    iP-PCCPCH              ENUMERATED{switchOff-1-Frame,switchOff-2-Frames},
    burstModeParams        BurstModeParams      OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { IPDLTDDParameter-ExtIEs} } OPTIONAL,
    ...
}

IPDL-TDD-Parameters-LCR ::= SEQUENCE {
    iP-SpacingTDD          ENUMERATED{sp30,sp40,sp50,sp70,sp100,...},
    iP-Start               INTEGER(0..4095),
    iP-Sub                 ENUMERATED{first,second,both},
    burstModeParams        BurstModeParams      OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { IPDLTDDParameterLCR-ExtIEs} } OPTIONAL,
    ...
}

BurstModeParams ::= SEQUENCE {
    burstStart             INTEGER(0..15),
    burstLenth             INTEGER(10..25),
    burstFreq              INTEGER(1..16),
    ...
}

```

```

IPDLTDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IPDLTDDParameterLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

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LimitedPowerIncrease ::= ENUMERATED {
    used,
    not-used
}

Local-Cell-ID ::= INTEGER (0..268435455)

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MACdPDU-Size ::= INTEGER (1..5000,...)

MACdPDU-Size-Indexlist ::= SEQUENCE (Size (1..maxNrOfMACdPDUIndexes)) OF MACdPDU-Size-IndexItem

MACdPDU-Size-IndexItem ::= SEQUENCE {
    sID                INTEGER (0..7),
    macdPDU-Size       MACdPDU-Size,
    iE-Extensions      ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-ExtIEs } }           OPTIONAL,
    ...
}

MACdPDU-Size-IndexItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

MACdPDU-Size-Indexlist-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdPDUIndexes)) OF MACdPDU-Size-IndexItem-to-Modify

MACdPDU-Size-IndexItem-to-Modify ::= SEQUENCE {
    sID                INTEGER (0..7),
    macdPDU-Size       MACdPDU-Size
    iE-Extensions      ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-to-Modify-ExtIEs } }           OPTIONAL,
                                                                OPTIONAL,
}

```



```

}
...
}
MACdPDU-Size-IndexItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
Measurement-Feedback-Reporting-Cycle ::= ENUMERATED {
v0,
v1,
v5,
v10,
v20,
v40,
v80,
...
}
MaximumDL-PowerCapability ::= INTEGER(0..500)
-- Unit dBm, Range 0dBm .. 50dBm, Step +0.1dB
Maximum-PDSCH-Power ::= SEQUENCE {
maximum-PDSCH-Power-SF4 DL-Power OPTIONAL,
maximum-PDSCH-Power-SF8 DL-Power OPTIONAL,
maximum-PDSCH-Power-SF16 DL-Power OPTIONAL,
maximum-PDSCH-Power-SF32 DL-Power OPTIONAL,
maximum-PDSCH-Power-SF64 DL-Power OPTIONAL,
maximum-PDSCH-Power-SF128 DL-Power OPTIONAL,
maximum-PDSCH-Power-SF256 DL-Power OPTIONAL,
IE-Extensions ProtocolExtensionContainer { { Maximum-PDSCH-Power-ExtIEs } } OPTIONAL,
...
}
Maximum-PDSCH-Power-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
MaximumTransmissionPower ::= INTEGER(0..500)
-- Unit dBm, Range 0dBm .. 50dBm, Step +0.1dB
MaxNrOfUL-DPDCHs ::= INTEGER (1..6)
Max-Number-of-PCPCHes ::= INTEGER (1..64,...)
MaxPRACH-MidambleShifts ::= ENUMERATED {
shift4,
shift8,
...
}
MeasurementFilterCoefficient ::= ENUMERATED {k0, k1, k2, k3, k4, k5, k6, k7, k8, k9, k11, k13, k15, k17, k19,...}
-- Measurement Filter Coefficient to be used for measurement

```

MeasurementID ::= INTEGER (0..1048575)

```
MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
  SEQUENCE {
    iE-ID ProtocolIE-ID,
    repetitionNumber RepetitionNumber1 OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
    ...
  }
```

```
MessageStructure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

MidambleConfigurationBurstType1And3 ::= ENUMERATED {v4, v8, v16}

MidambleConfigurationBurstType2 ::= ENUMERATED {v3, v6}

```
MidambleShiftAndBurstType ::= CHOICE {
  type1 SEQUENCE {
    midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
    midambleAllocationMode CHOICE {
      defaultMidamble NULL,
      commonMidamble NULL,
      ueSpecificMidamble MidambleShiftLong,
      ...
    },
    ...
  },
  type2 SEQUENCE {
    midambleConfigurationBurstType2 MidambleConfigurationBurstType2,
    midambleAllocationMode CHOICE {
      defaultMidamble NULL,
      commonMidamble NULL,
      ueSpecificMidamble MidambleShiftShort,
      ...
    },
    ...
  },
  type3 SEQUENCE {
    midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
    midambleAllocationMode CHOICE {
      defaultMidamble NULL,
      ueSpecificMidamble MidambleShiftLong,
      ...
    },
    ...
  },
  ...
}
```

MidambleShiftLong ::= INTEGER (0..15)

```
MidambleShiftShort ::=                INTEGER (0..5)

MidambleShiftLCR ::= SEQUENCE {
    midambleAllocationMode             MidambleAllocationMode,
    midambleShift                       MidambleShiftLong     OPTIONAL,
    -- The IE shall be present if the Midamble Allocation Mode IE is set to "UE specific midamble".
    iE-Extensions                       ProtocolExtensionContainer { {MidambleShiftLCR-ExtIEs} }     OPTIONAL,
    ...
}

MidambleAllocationMode ::= ENUMERATED {
    defaultMidamble,
    commonMidamble,
    uESpecificMidamble,
    ...
}

MidambleShiftLCR-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

MinimumDL-PowerCapability ::= INTEGER(0..800)
-- Unit dBm, Range -30dBm .. 50dBm, Step +0.1dB

MinSpreadingFactor ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256,
    v512
}

Modulation ::= ENUMERATED {
    qPSK,
    eightPSK,
    ...
}

MinUL-ChannelisationCodeLength ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256,
    ...
}
```

```

MultiplexingPosition ::= ENUMERATED {
    fixed,
    flexible
}

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NCyclesPerSFNperiod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    ...,
    v16,
    v32,
    v64
}

NEOT ::= INTEGER (0..8)

NFmax ::= INTEGER (1..64,...)

NRepetitionsPerCyclePeriod ::= INTEGER (2..10)

N-INSYNC-IND ::= INTEGER (1..256)

N-OUTSYNC-IND ::= INTEGER (1..256)

NeighbouringCellMeasurementInformation ::= SEQUENCE (SIZE (1..maxNrOfMeasNCell)) OF
    CHOICE {
        neighbouringFDDCellMeasurementInformation      NeighbouringFDDCellMeasurementInformation,
        neighbouringTDDCellMeasurementInformation      NeighbouringTDDCellMeasurementInformation,
        -- Applicable to 3.84Mcps TDD only
        ...,
        extension-neighbouringCellMeasurementInformation      Extension-neighbouringCellMeasurementInformation
    }

Extension-neighbouringCellMeasurementInformation ::= ProtocolIE-Single-Container {{ Extension-neighbouringCellMeasurementInformationIE }}

Extension-neighbouringCellMeasurementInformationIE NBAP-PROTOCOL-IES ::= {
    { ID id-neighbouringTDDCellMeasurementInformationLCR      CRITICALITY reject EXTENSION NeighbouringTDDCellMeasurementInformationLCR PRESENCE
    mandatory }, -- Applicable to 1.28Mcps TDD only
    ...
}

NeighbouringFDDCellMeasurementInformation ::= SEQUENCE {
    uC-Id                UC-Id,
    uARFCN                UARFCN,
    primaryScramblingCode PrimaryScramblingCode,
    iE-Extensions        ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs } } OPTIONAL,
    ...
}

```

```

}

NeighbouringFDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

NeighbouringTDDCellMeasurementInformation ::= SEQUENCE {
  uC-Id                UC-Id,
  uARFCN               UARFCN,
  cellParameterID     CellParameterID,
  timeSlot             TimeSlot                OPTIONAL,
  midambleShiftAndBurstType MidambleShiftAndBurstType  OPTIONAL,
  iE-Extensions       ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem-ExtIEs } } OPTIONAL,
  ...
}

NeighbouringTDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

NeighbouringTDDCellMeasurementInformationLCR ::= SEQUENCE {
  uC-Id                UC-Id,
  uARFCN               UARFCN,
  cellParameterID     CellParameterID,
  timeSlotLCR         TimeSlotLCR            OPTIONAL,
  midambleShiftLCR   MidambleShiftLCR      OPTIONAL,
  iE-Extensions       ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs } } OPTIONAL,
  ...
}

NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

NodeB-CommunicationContextID ::= INTEGER (0..1048575)

NStartMessage ::= INTEGER (1..8)

NSubCyclesPerCyclePeriod ::= INTEGER (1..16,...)

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PagingIndicatorLength ::= ENUMERATED {
  v2,
  v4,
  v8,
  ...
}

```

```

}

PayloadCRC-PresenceIndicator ::= ENUMERATED {
    cRC-Included,
    cRC-NotIncluded,
    ...
}

PCCPCH-Power ::= INTEGER (-150..400,...)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH shall be set to -150
-- If power >= 40 PCCPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB

PCP-Length ::= ENUMERATED{
    v0,
    v8
}

PDSCH-CodeMapping ::= SEQUENCE {
    dl-ScramblingCode          DL-ScramblingCode,
    signallingMethod          CHOICE {
        code-Range            PDSCH-CodeMapping-PDSCH-CodeMappingInformationList,
        tFCI-Range            PDSCH-CodeMapping-DSCH-MappingInformationList,
        explicit               PDSCH-CodeMapping-PDSCH-CodeInformationList,
        ...,
        replace                PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList
    },
    iE-Extensions              ProtocolExtensionContainer { { PDSCH-CodeMapping-ExtIEs } } OPTIONAL,
    ...
}

PDSCH-CodeMapping-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-CodeMapping-CodeNumberComp ::= INTEGER (0..maxCodeNrComp-1)

PDSCH-CodeMapping-SpreadingFactor ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256,
    ...
}

PDSCH-CodeMapping-PDSCH-CodeMappingInformationList ::= SEQUENCE (SIZE (1..maxNrOfCodeGroups)) OF
SEQUENCE {
    spreadingFactor            PDSCH-CodeMapping-SpreadingFactor,
    multi-CodeInfo            PDSCH-Multi-CodeInfo,

```

```

    start-CodeNumber      PDSCH-CodeMapping-CodeNumberComp,
    stop-CodeNumber       PDSCH-CodeMapping-CodeNumberComp,
    iE-Extensions         ProtocolExtensionContainer { { PDSCH-CodeMapping-PDSCH-CodeMappingInformationList-ExtIEs} } OPTIONAL,
    ...
}

PDSCH-CodeMapping-PDSCH-CodeMappingInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-CodeMapping-DSCH-MappingInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCIGroups)) OF
SEQUENCE {
    maxTFCI-field2-Value      PDSCH-CodeMapping-MaxTFCI-Field2-Value,
    spreadingFactor           PDSCH-CodeMapping-SpreadingFactor,
    multi-CodeInfo            PDSCH-Multi-CodeInfo,
    codeNumber                PDSCH-CodeMapping-CodeNumberComp,
    iE-Extensions            ProtocolExtensionContainer { { PDSCH-CodeMapping-DSCH-MappingInformationList-ExtIEs} } OPTIONAL,
    ...
}

PDSCH-CodeMapping-DSCH-MappingInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-CodeMapping-MaxTFCI-Field2-Value ::= INTEGER (1..1023)

PDSCH-CodeMapping-PDSCH-CodeInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
SEQUENCE {
    spreadingFactor           PDSCH-CodeMapping-SpreadingFactor,
    multi-CodeInfo            PDSCH-Multi-CodeInfo,
    codeNumber                PDSCH-CodeMapping-CodeNumberComp,
    iE-Extensions            ProtocolExtensionContainer { { PDSCH-CodeMapping-PDSCH-CodeInformationList-ExtIEs} } OPTIONAL,
    ...
}

PDSCH-CodeMapping-PDSCH-CodeInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
SEQUENCE {
    tfci-Field2              TFCS-MaxTFCI-field2-Value,
    spreadingFactor           PDSCH-CodeMapping-SpreadingFactor,
    multi-CodeInfo            PDSCH-Multi-CodeInfo,
    codeNumber                PDSCH-CodeMapping-CodeNumberComp,
    iE-Extensions            ProtocolExtensionContainer { { PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList-ExtIEs} } OPTIONAL,
    ...
}

PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
PDSCH-Multi-CodeInfo ::= INTEGER (1..16)

PDSCH-ID ::= INTEGER (0..255)

PDSCHSet-ID ::= INTEGER (0..255)

PICH-Mode ::= ENUMERATED {
    v18,
    v36,
    v72,
    v144,
    ...
}

PICH-Power ::= INTEGER (-10..5)
-- Unit dB, Range -10dB .. +5dB, Step +1dB

PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
}

PowerOffset ::= INTEGER (0..24)
-- PowerOffset = offset * 0.25
-- Unit dB, Range 0dB .. +6dB, Step +0.25dB

PowerRaiseLimit ::= INTEGER (0..10)

PRACH-Midamble ::= ENUMERATED {
    inverted,
    direct,
    ...
}

PRC ::= INTEGER (-2047..2047)
--pseudo range correction; scaling factor 0.32 meters

PRCDeviation ::= ENUMERATED {
    one,
    two,
    five,
    ten,
    ...
}

PreambleSignatures ::= BIT STRING {
    signature15(0),
    signature14(1),
    signature13(2),
    signature12(3),
    signature11(4),
    signature10(5),
```



```

signature9(6),
signature8(7),
signature7(8),
signature6(9),
signature5(10),
signature4(11),
signature3(12),
signature2(13),
signature1(14),
signature0(15)
} (SIZE (16))

PreambleThreshold ::= INTEGER (0..72)
-- 0= -36.0dB, 1= -35.5dB, ... , 72= 0.0dB

PredictedSFNSFNDeviationLimit ::=INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

PredictedTUTRANGPSDeviationLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

Pre-emptionCapability ::= ENUMERATED {
    shall-not-trigger-pre-emption,
    may-trigger-pre-emption
}

Pre-emptionVulnerability ::= ENUMERATED {
    not-pre-emptable,
    pre-emptable
}

PrimaryCPICH-Power ::= INTEGER(-100..500)
-- step 0.1 (Range -10.0..50.0) Unit is dBm

PrimaryScramblingCode ::= INTEGER (0..511)

PriorityLevel          ::= INTEGER (0..15)
-- 0 = spare, 1 = highest priority, ...14 = lowest priority and 15 = no priority

PriorityQueue-Id ::= INTEGER (0..maxNrOfPriorityQueues-1)

PriorityQueue-InfoList ::= SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF PriorityQueue-InfoItem

PriorityQueue-InfoItem ::= SEQUENCE {
    priorityQueueId          PriorityQueue-Id,
    schedulingPriorityIndicator SchedulingPriorityIndicator,
    macdPDU-Size-Index      MACdPDU-Size-Indexlist,
    iE-Extensions           ProtocolExtensionContainer { { PriorityQueue-InfoItem-ExtIEs} } OPTIONAL,
    ...
}

PriorityQueue-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...

```

```

}

PriorityQueue-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF PriorityQueue-InfoItem-to-Modify

PriorityQueue-InfoItem-to-Modify ::= SEQUENCE {
    priorityQueueId          PriorityQueue-Id,
    schedulingPriorityIndicator SchedulingPriorityIndicator OPTIONAL,
    macdPDU-Size-Index-to-Modify MACdPDU-Size-Indexlist-to-Modify OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Modify-ExtIEs} } OPTIONAL,
    ...
}

PriorityQueue-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PrimaryCCPCH-RSCP ::= INTEGER (0..91)

PropagationDelay ::= INTEGER (0..255)
-- Unit: chips, step size 3 chips
-- example: 0 = 0chip, 1 = 3chips

SCH-TimeSlot ::= INTEGER (0..6)

PunctureLimit ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100%

PUSCH-ID ::= INTEGER (0..255)

PUSCHSet-ID ::= INTEGER (0..255)

-- =====
-- Q
-- =====

QE-Selector ::= ENUMERATED {
    selected,
    non-selected
}

-- =====
-- R
-- =====

RACH-SlotFormat ::= ENUMERATED {
    v0,
    v1,
    v2,
    v3,
    ...
}

RACH-SubChannelNumbers ::= BIT STRING {

```

```

subCh11(0),
subCh10(1),
subCh9(2),
subCh8(3),
subCh7(4),
subCh6(5),
subCh5(6),
subCh4(7),
subCh3(8),
subCh2(9),
subCh1(10),
subCh0(11)
} (SIZE (12))

```

```

RL-Specific-DCH-Info ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF RL-Specific-DCH-Info-Item

```

```

RL-Specific-DCH-Info-Item ::= SEQUENCE {
    dCH-id                DCH-ID,
    bindingID             BindingID                               OPTIONAL,
    transportlayeraddress TransportLayerAddress                 OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { RL-Specific-DCH-Info-Item-ExtIEs } } OPTIONAL,
    ...
}

```

```

RL-Specific-DCH-Info-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

Range-Correction-Rate ::= INTEGER (-127..127)
-- scaling factor 0.032 m/s

```

```

ReferenceClockAvailability ::= ENUMERATED {
    available,
    notAvailable
}

```

```

ReferenceSFNoffset ::= INTEGER (0..255)

```

```

RepetitionLength ::= INTEGER (1..63)

```

```

RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    v16,
    v32,
    v64,
    ...
}

```

```

RepetitionNumber0 ::= INTEGER (0..255)

```

RepetitionNumber1 ::= INTEGER (1..256)

RefTFCNumber ::= INTEGER (0..3)

```
ReportCharacteristics ::= CHOICE {
    onDemand          NULL,
    periodic          ReportCharacteristicsType-ReportPeriodicity,
    event-a           ReportCharacteristicsType-EventA,
    event-b           ReportCharacteristicsType-EventB,
    event-c           ReportCharacteristicsType-EventC,
    event-d           ReportCharacteristicsType-EventD,
    event-e           ReportCharacteristicsType-EventE,
    event-f           ReportCharacteristicsType-EventF,
    ...,
    extension-ReportCharacteristics  Extension-ReportCharacteristics
}
```

Extension-ReportCharacteristics ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsIE }}

```
Extension-ReportCharacteristicsIE NBAP-PROTOCOL-IES ::= {
    { ID id-ReportCharacteristicsType-OnModification  CRITICALITY reject  TYPE ReportCharacteristicsType-OnModification  PRESENCE mandatory }
}
```

```
ReportCharacteristicsType-EventA ::= SEQUENCE {
    measurementThreshold          ReportCharacteristicsType-MeasurementThreshold,
    measurementHysteresisTime     ReportCharacteristicsType-ScaledMeasurementHysteresisTime          OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { ReportCharacteristicsType-EventA-ExtIEs } }  OPTIONAL,
    ...
}
```

```
ReportCharacteristicsType-EventA-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
ReportCharacteristicsType-EventB ::= SEQUENCE {
    measurementThreshold          ReportCharacteristicsType-MeasurementThreshold,
    measurementHysteresisTime     ReportCharacteristicsType-ScaledMeasurementHysteresisTime          OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { ReportCharacteristicsType-EventB-ExtIEs } }  OPTIONAL,
    ...
}
```

```
ReportCharacteristicsType-EventB-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
ReportCharacteristicsType-EventC ::= SEQUENCE {
    measurementIncreaseThreshold  ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime         ReportCharacteristicsType-ScaledMeasurementChangeTime,
    iE-Extensions                 ProtocolExtensionContainer { { ReportCharacteristicsType-EventC-ExtIEs } }  OPTIONAL,
    ...
}
```

```
ReportCharacteristicsType-EventC-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```

}
...
}

ReportCharacteristicsType-EventD ::= SEQUENCE {
    measurementDecreaseThreshold    ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime          ReportCharacteristicsType-ScaledMeasurementChangeTime,
    iE-Extensions                  ProtocolExtensionContainer { { ReportCharacteristicsType-EventD-ExtIEs } }    OPTIONAL,
    ...
}

ReportCharacteristicsType-EventD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-EventE ::= SEQUENCE {
    measurementThreshold1          ReportCharacteristicsType-MeasurementThreshold,
    measurementThreshold2          ReportCharacteristicsType-MeasurementThreshold    OPTIONAL,
    measurementHysteresisTime      ReportCharacteristicsType-ScaledMeasurementHysteresisTime    OPTIONAL,
    reportPeriodicity              ReportCharacteristicsType-ReportPeriodicity    OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { ReportCharacteristicsType-EventE-ExtIEs } }    OPTIONAL,
    ...
}

ReportCharacteristicsType-EventE-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-EventF ::= SEQUENCE {
    measurementThreshold1          ReportCharacteristicsType-MeasurementThreshold,
    measurementThreshold2          ReportCharacteristicsType-MeasurementThreshold    OPTIONAL,
    measurementHysteresisTime      ReportCharacteristicsType-ScaledMeasurementHysteresisTime    OPTIONAL,
    reportPeriodicity              ReportCharacteristicsType-ReportPeriodicity    OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { ReportCharacteristicsType-EventF-ExtIEs } }    OPTIONAL,
    ...
}

ReportCharacteristicsType-EventF-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-OnModification ::= SEQUENCE {
    measurementThreshold            ReportCharacteristicsType-MeasurementThreshold,
    iE-Extensions                  ProtocolExtensionContainer { { ReportCharacteristicsType-OnModification-ExtIEs } }    OPTIONAL,
    ...
}

ReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold ::= CHOICE {
    received-total-wide-band-power    Received-total-wide-band-power-Value-IncrDecrThres,
    transmitted-carrier-power         Transmitted-Carrier-Power-Value,
}

```

```

    acknowledged-prach-preambles      Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP                    UL-TimeslotISCP-Value-IncrDecrThres,
    sir                                 SIR-Value-IncrDecrThres,
    sir-error                           SIR-Error-Value-IncrDecrThres,
    transmitted-code-power              Transmitted-Code-Power-Value-IncrDecrThres,
    rscp                                 RSCP-Value-IncrDecrThres,
    round-trip-time                     Round-Trip-Time-IncrDecrThres,
    acknowledged-PCPCH-access-preambles Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles     Detected-PCPCH-access-preambles,
    ...
}

ReportCharacteristicsType-MeasurementThreshold ::= CHOICE {
    received-total-wide-band-power      Received-total-wide-band-power-Value,
    transmitted-carrier-power           Transmitted-Carrier-Power-Value,
    acknowledged-prach-preambles        Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP                     UL-TimeslotISCP-Value,
    sir                                  SIR-Value,
    sir-error                            SIR-Error-Value,
    transmitted-code-power               Transmitted-Code-Power-Value,
    rscp                                 RSCP-Value,
    rx-timing-deviation                 Rx-Timing-Deviation-Value,
    round-trip-time                      Round-Trip-Time-Value,
    acknowledged-PCPCH-access-preambles Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles     Detected-PCPCH-access-preambles,
    ...,
    extension-ReportCharacteristicsType-MeasurementThreshold      Extension-ReportCharacteristicsType-MeasurementThreshold
}

Extension-ReportCharacteristicsType-MeasurementThreshold ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsType-
MeasurementThresholdIE }}

Extension-ReportCharacteristicsType-MeasurementThresholdIE NBAP-PROTOCOL-IES ::= {
    { ID id-TUTRANGPSMeasurementThresholdInformation      CRITICALITY reject TYPE TUTRANGPSMeasurementThresholdInformation      PRESENCE mandatory }|
    { ID id-SFNFSNMeasurementThresholdInformation         CRITICALITY reject TYPE SFNFSNMeasurementThresholdInformation         PRESENCE mandatory }
}

ReportCharacteristicsType-ScaledMeasurementChangeTime ::= CHOICE {
    msec                                 MeasurementChangeTime-Scaledmsec,
    ...
}

MeasurementChangeTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementChangeTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms

ReportCharacteristicsType-ScaledMeasurementHysteresisTime ::= CHOICE {
    msec                                 MeasurementHysteresisTime-Scaledmsec,
    ...
}

MeasurementHysteresisTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementHysteresisTime-Scaledmsec = Time * 10

```

```

-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms

ReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
    msec          ReportPeriodicity-Scaledmsec,
    min          ReportPeriodicity-Scaledmin,
    ...
}

ReportPeriodicity-Scaledmsec ::= INTEGER (1..6000,...)
-- ReportPeriodicity-msec = ReportPeriodicity * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms

ReportPeriodicity-Scaledmin ::= INTEGER (1..60,...)
-- Unit min, Range 1min .. 60min(hour), Step 1min

ReportPeriodicity-Scaledhour ::= INTEGER (1..24,...)
-- Unit hour, Range 1hour .. 24hours(day), Step 1hour

ResourceOperationalState ::= ENUMERATED {
    enabled,
    disabled
}

CommonTransportChannel-InformationResponse ::= SEQUENCE {
    commonTransportChannelID CommonTransportChannelID,
    bindingID BindingID OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
    IE-Extensions ProtocolExtensionContainer { { CommonTransportChannel-InformationResponse-ExtIEs } } OPTIONAL,
    ...
}

CommonTransportChannel-InformationResponse-ExtIEs-NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

LimitedPowerIncrease ::= ENUMERATED {
    used,
    not-used
}

RL-ID ::= INTEGER (0..31)

RL-Set-ID ::= INTEGER (0..31)

Round-Trip-Time-IncrDecrThres ::= INTEGER(0..32766)

RNC-ID ::= INTEGER (0..4095)

Round-Trip-Time-Value ::= INTEGER(0..32767)
-- According to mapping in [22]

RSCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]

```

```

RSCP-Value-IncrDecrThres ::= INTEGER (0..126)

Received-total-wide-band-power-Value ::= INTEGER(0..621)
-- According to mapping in [22]/[23]

Received-total-wide-band-power-Value-IncrDecrThres ::= INTEGER (0..620)

RequestedDataValueInformation ::= CHOICE {
    informationAvailable      InformationAvailable,
    informationnotAvailable   InformationnotAvailable
}

InformationAvailable ::= SEQUENCE {
    requesteddataValue      RequestedDataValue,
    ie-Extensions           ProtocolExtensionContainer { { InformationAvailableItem-ExtIEs } } OPTIONAL,
    ...
}

InformationAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

InformationnotAvailable ::= NULL

RequestedDataValue ::= SEQUENCE {
    dgps-corrections        DGPSCorrections OPTIONAL,
    gps-navandrecovery      GPS-NavigationModel-and-TimeRecovery OPTIONAL,
    gps-ionos-model         GPS-Ionospheric-Model OPTIONAL,
    gps-utc-model           GPS-UTC-Model OPTIONAL,
    gps-almanac             GPS-Almanac OPTIONAL,
    gps-rt-integrity        GPS-RealTime-Integrity OPTIONAL,
    gpsrxpos                GPS-RX-POS OPTIONAL,
    ...
}

Rx-Timing-Deviation-Value ::= INTEGER (0..8191)
-- According to mapping in [23]

Rx-Timing-Deviation-Value-LCR ::= INTEGER (0..255)
-- According to mapping in [23]

-- =====
-- S
-- =====

AdjustmentPeriod          ::= INTEGER(1..256)
-- Unit Frame

SAT-ID ::= INTEGER (0..63)

SAT-Info-Almanac ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-Almanac-Item

```



```

SAT-Info-Almanac-Item ::= SEQUENCE {
    data-id          DATA-ID,
    sat-id           SAT-ID,
    gps-e-alm        BIT STRING (SIZE (16)),
    gps-toa-alm      BIT STRING (SIZE (8)),
    gps-delta-I-alm BIT STRING (SIZE (16)),
    omegadot-alm     BIT STRING (SIZE (16)),
    svhealth-alm     BIT STRING (SIZE (8)),
    gps-a-sqrt-alm   BIT STRING (SIZE (24)),
    omegazero-alm    BIT STRING (SIZE (24)),
    m-zero-alm       BIT STRING (SIZE (24)),
    gps-omega-alm    BIT STRING (SIZE (24)),
    gps-af-zero-alm  BIT STRING (SIZE (11)),
    gps-af-one-alm   BIT STRING (SIZE (11)),
    ie-Extensions    ProtocolExtensionContainer { { SAT-Info-Almanac-Item-ExtIEs} } OPTIONAL,
    ...
}

SAT-Info-Almanac-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SAT-Info-DGPSCorrections ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-DGPSCorrections-Item

SAT-Info-DGPSCorrections-Item ::= SEQUENCE {
    sat-id          SAT-ID,
    iode-dgps       BIT STRING (SIZE (8)),
    udre            UDRE,
    prc             PRC,
    range-correction-rate Range-Correction-Rate,
    ie-Extensions    ProtocolExtensionContainer { { SAT-Info-DGPSCorrections-Item-ExtIEs} } OPTIONAL,
    ...
}

SAT-Info-DGPSCorrections-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SATInfo-RealTime-Integrity ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-RealTime-Integrity-Item

SAT-Info-RealTime-Integrity-Item ::= SEQUENCE {
    bad-sat-id      SAT-ID,
    ie-Extensions    ProtocolExtensionContainer { { SAT-Info-RealTime-Integrity-Item-ExtIEs} } OPTIONAL,
    ...
}

SAT-Info-RealTime-Integrity-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ScaledAdjustmentRatio ::= INTEGER(0..100)
-- AdjustmentRatio = ScaledAdjustmentRatio / 100

```

```

MaxAdjustmentStep ::= INTEGER(1..10)
-- Unit Slot

SchedulingPriorityIndicator ::= INTEGER (0..15) -- lowest (0), highest (15)

SID ::= INTEGER (0..maxNrOfMACdPDUIndexes-1)

ScramblingCodeNumber ::= INTEGER (0..15)

SecondaryCCPCH-SlotFormat ::= INTEGER(0..17,...)

Segment-Type ::= ENUMERATED {
    first-segment,
    first-segment-short,
    subsequent-segment,
    last-segment,
    last-segment-short,
    complete-SIB,
    complete-SIB-short,
    ...
}

S-FieldLength ::= ENUMERATED {
    v1,
    v2,
    ...
}

SFN ::= INTEGER (0..4095)

SFNSFN-FDD ::= INTEGER (0..614399)

SFNSFN-TDD ::= INTEGER (0..40961)

SFNSFNChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

SFNSFNDriftRate ::= INTEGER (-100..100)
-- Unit chip/s, Step 1/256 chip/s, Range -100/256..+100/256 chip/s

SFNSFNDriftRateQuality ::= INTEGER (0..100)
-- Unit chip/s, Step 1/256 chip/s, Range 0..100/256 chip/s

SFNSFNMeasurementThresholdInformation ::= SEQUENCE {
    sFNSFNChangeLimit SFNSFNChangeLimit OPTIONAL,
    predictedSFNSFNDeviationLimit PredictedSFNSFNDeviationLimit OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { SFNSFNMeasurementThresholdInformation-ExtIEs } } OPTIONAL,
    ...
}

SFNSFNMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

SFNSFNMeasurementValueInformation ::= SEQUENCE {
    successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
        SEQUENCE {
            uC-Id UC-Id,
            SFNSFNValue SFNSFNValue,
            SFNSFNQuality SFNSFNQuality OPTIONAL,
            SFNSFNDriftRate SFNSFNDriftRate,
            SFNSFNDriftRateQuality SFNSFNDriftRateQuality,
            SFNSFNTimeStampInformation SFNSFNTimeStampInformation,
            iE-Extensions ProtocolExtensionContainer { { SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs} } OPTIONAL,
            ...
        },
    unsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
        SEQUENCE {
            uC-Id UC-Id,
            iE-Extensions ProtocolExtensionContainer { { UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs} } OPTIONAL,
            ...
        },
    iE-Extensions ProtocolExtensionContainer { { SFNSFNMeasurementValueInformationItem-ExtIEs} } OPTIONAL,
    ...
}

SFNSFNMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip

ShutdownTimer ::= INTEGER (1..3600)
-- Unit sec

SIB-Originator ::= ENUMERATED {
    nodeB,
    cRNC,
    ...
}

SIR-Error-Value ::= INTEGER (0..125)
-- According to mapping in [22]

SFNSFNTimeStampInformation ::= CHOICE {

```

```

    sFNSFNTimeStamp-FDD      SFN,
    sFNSFNTimeStamp-TDD      SFNSFNTimeStamp-TDD,
    ...}

SFNSFNTimeStamp-TDD ::= SEQUENCE {
    sFN                      SFN,
    timeSlot                 TimeSlot,
    iE-Extensions            ProtocolExtensionContainer { { SFNSFNTimeStamp-ExtIEs} } OPTIONAL,
    ...
}

SFNSFNTimeStamp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNValue ::= CHOICE {
    sFNSFN-FDD               SFNSFN-FDD,
    sFNSFN-TDD               SFNSFN-TDD,
    ...
}

SIR-Error-Value-IncrDecrThres ::= INTEGER (0..124)

SIR-Value ::= INTEGER (0..63)
-- According to mapping in [22]/[23]

SIR-Value-IncrDecrThres ::= INTEGER (0..62)

SignallingBearerRequestIndicator ::= ENUMERATED {bearerRequested}

SpecialBurstScheduling ::= INTEGER (1..256)

SSDT-Cell-Identity ::= ENUMERATED {a, b, c, d, e, f, g, h}

SSDT-CellID-Length ::= ENUMERATED {
    short,
    medium,
    long
}

SSDT-Indication ::= ENUMERATED {
    ssdt-active-in-the-UE,
    ssdt-not-active-in-the-UE
}

Start-Of-Audit-Sequence-Indicator ::= ENUMERATED {
    start-of-audit-sequence,
    not-start-of-audit-sequence
}

STTD-Indicator ::= ENUMERATED {
    active,
    inactive,
}

```

```

}
...
}
SSDT-SupportIndicator ::= ENUMERATED {
    sSDT-Supported,
    sSDT-not-supported
}
SyncCase ::= INTEGER (1..2,...)
SYNCDLCodeId ::= INTEGER (1..32,...)
SyncFrameNumber ::= INTEGER (1..10)
SynchronisationReportCharacteristics ::= SEQUENCE {
    synchronisationReportCharacteristicsType SynchronisationReportCharacteristicsType,
    synchronisationReportCharactThreExc SynchronisationReportCharactThreExc OPTIONAL,
    -- This IE shall be included if the synchronisationReportCharacteristicsType IE is set to "thresholdExceeding".
    iE-Extensions ProtocolExtensionContainer { { SynchronisationReportCharacteristics-ExtIEs } } OPTIONAL,
    ...
}
SynchronisationReportCharacteristics-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    [ID id-SyncDLCodeIdThreInfoLCR CRITICALITY ignore EXTENSION SyncDLCodeIdThreInfoLCR PRESENCE optional ],
    ...
}
SynchronisationReportCharactThreExc ::= SEQUENCE (SIZE (1..maxNrOfCellSyncBursts)) OF SynchronisationReportCharactThreInfoItem -- Mandatory for
3.84Mcps TDD only
SynchronisationReportCharactThreInfoItem ::= SEQUENCE {
    syncFrameNumber SyncFrameNumber,
    cellSyncBurstInformation SEQUENCE (SIZE (1.. maxNrOfReceptsPerSyncFrame)) OF SynchronisationReportCharactCellSyncBurstInfoItem,
    iE-Extensions ProtocolExtensionContainer { { SynchronisationReportCharactThreInfoItem-ExtIEs } } OPTIONAL,
    ...
}
SynchronisationReportCharactThreInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
SynchronisationReportCharactCellSyncBurstInfoItem ::= SEQUENCE {
    cellSyncBurstCode CellSyncBurstCode,
    cellSyncBurstCodeShift CellSyncBurstCodeShift,
    cellSyncBurstTiming CellSyncBurstTiming OPTIONAL,
    cellSyncBurstTimingThreshold CellSyncBurstTimingThreshold OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs } } OPTIONAL,
    ...
}
SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

SyncDLCodeIdThreInfoLCR ::= SEQUENCE (SIZE (0..maxNoOfSyncFramesLCR)) OF SyncDLCodeIdThreInfoList --Mandatory for 1.28Mcps TDD only

```
SyncDLCodeIdThreInfoList ::= SEQUENCE {
    syncFrameNoToReceive      SyncFrameNumber,
    syncDLCodeIdInfoLCR      SyncDLCodeInfoListLCR,
    iE-Extensions            ProtocolExtensionContainer { { SyncDLCodeIdThreInfoList-ExtIEs } } OPTIONAL,
    ...
}
```

```
SyncDLCodeIdThreInfoList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

SyncDLCodeInfoListLCR ::= SEQUENCE (SIZE (1..maxNoOfSyncDLCodesLCR)) OF SyncDLCodeInfoItemLCR

```
SyncDLCodeInfoItemLCR ::= SEQUENCE {
    syncDLCodeId              SYNCDLCodeId,
    syncDLCodeIdArrivTime     CellSyncBurstTiming OPTIONAL,
    syncDLCodeIdTimingThre    CellSyncBurstTimingThreshold OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { SyncDLCodeInfoItem-LCR-ExtIEs } } OPTIONAL,
    ...
}
```

```
SyncDLCodeInfoItem-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
SynchronisationReportCharacteristicsType ::= ENUMERATED {
    frameRelated,
    sFNperiodRelated,
    cycleLengthRelated,
    thresholdExceeding,
    frequencyAcquisitionCompleted,
    ...
}
```

```
SynchronisationReportType ::= ENUMERATED {
    initialPhase,
    steadyStatePhase,
    lateEntrantCell,
    frequencyAcquisition,
    ...
}
```

```
-- =====
-- T
-- =====
```

```
T-Cell ::= ENUMERATED {
    v0,
    v1,
    v2,
}
```

```
v3,  
v4,  
v5,  
v6,  
v7,  
v8,  
v9  
}  
  
T-RLFFAILURE ::= INTEGER (0..255)  
-- Unit seconds, Range 0s .. 25.5s, Step 0.1s  
  
TDD-ChannelisationCode ::= ENUMERATED {  
  chCode1div1,  
  chCode2div1,  
  chCode2div2,  
  chCode4div1,  
  chCode4div2,  
  chCode4div3,  
  chCode4div4,  
  chCode8div1,  
  chCode8div2,  
  chCode8div3,  
  chCode8div4,  
  chCode8div5,  
  chCode8div6,  
  chCode8div7,  
  chCode8div8,  
  chCode16div1,  
  chCode16div2,  
  chCode16div3,  
  chCode16div4,  
  chCode16div5,  
  chCode16div6,  
  chCode16div7,  
  chCode16div8,  
  chCode16div9,  
  chCode16div10,  
  chCode16div11,  
  chCode16div12,  
  chCode16div13,  
  chCode16div14,  
  chCode16div15,  
  chCode16div16,  
  ...  
}  
  
TDD-ChannelisationCodeLCR ::= SEQUENCE {  
  tDD-ChannelisationCode      TDD-ChannelisationCode,  
  modulation                   Modulation, -- Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD  
  ...  
}
```

```

TDD-DL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem

TDD-DL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCode TDD-ChannelisationCode,
    iE-Extensions          ProtocolExtensionContainer { { TDD-DL-Code-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

TDD-DL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-DL-Code-LCR-InformationItem

TDD-DL-Code-LCR-InformationItem ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    iE-Extensions          ProtocolExtensionContainer { { TDD-DL-Code-LCR-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

TDD-DL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DPCHOffset ::= CHOICE {
    initialOffset    INTEGER (0..255),
    noinitialOffset  INTEGER (0..63)
}

TDD-PhysicalChannelOffset ::= INTEGER (0..63)

TDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size1,
    step-size2,
    step-size3,
    ...
}

TransportFormatCombination-Beta ::= CHOICE {
    signalledGainFactors SEQUENCE {
        gainFactor CHOICE {
            fdd SEQUENCE {
                betaC BetaCD,
                betaD BetaCD,
                iE-Extensions ProtocolExtensionContainer { { GainFactorFDD-ExtIEs } } OPTIONAL,
                ...
            },
            tdd BetaCD,
            ...
        },
        refTFCNumber RefTFCNumber OPTIONAL,
    }
}

```



```

        iE-Extensions          ProtocolExtensionContainer { { SignalledGainFactors-ExtIEs } }          OPTIONAL,
        ...
    },
    computedGainFactors          RefTFCNumber,
    ...
}

GainFactorFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SignalledGainFactors-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-UL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationItem

TDD-UL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID                      DPCH-ID,
    tdd-ChannelisationCode        TDD-ChannelisationCode,
    iE-Extensions                 ProtocolExtensionContainer { { TDD-UL-Code-InformationItem-ExtIEs } }          OPTIONAL,
    ...
}

TDD-UL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-UL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-UL-Code-LCR-InformationItem

TDD-UL-Code-LCR-InformationItem ::= SEQUENCE {
    dPCH-ID                      DPCH-ID,
    tdd-ChannelisationCodeLCR      TDD-ChannelisationCodeLCR,
    iE-Extensions                 ProtocolExtensionContainer { { TDD-UL-Code-LCR-InformationItem-ExtIEs } }          OPTIONAL,
    ...
}

TDD-UL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI-Coding ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    ...
}

TFCI-Presence ::= ENUMERATED {
    present,
    not-present
}

```

```

TFCI-SignallingMode ::= SEQUENCE {
    tFCI-SignallingOption      TFCI-SignallingMode-TFCI-SignallingOption,
    splitType                  TFCI-SignallingMode-SplitType              OPTIONAL,
    -- This IE shall be present if the TFCI signalling option is split --
    lengthOfTFCI2              TFCI-SignallingMode-LengthOfTFCI2          OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { TFCI-SignallingMode-ExtIEs} } OPTIONAL,
    ...
}

TFCI-SignallingMode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI-SignallingMode-LengthOfTFCI2 ::= INTEGER (1..10)

TFCI-SignallingMode-SplitType ::= ENUMERATED {
    hard,
    logical
}

TFCI-SignallingMode-TFCI-SignallingOption ::= ENUMERATED {
    normal,
    split
}

TFCI2-BearerInformationResponse ::= SEQUENCE {
    bindingID                  BindingID,
    transportLayerAddress      TransportLayerAddress,
    iE-Extensions              ProtocolExtensionContainer { { TFCI2-BearerInformationResponse-ExtIEs} } OPTIONAL,
    ...
}

TFCI2-BearerInformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI2BearerRequestIndicator ::= ENUMERATED {newBearerRequested}

TGD                          ::= INTEGER (0|15..269)
-- 0 = Undefined, only one transmission gap in the transmission gap pattern sequence

TGPRC                        ::= INTEGER (0..511)
-- 0 = infinity

TGPSID                       ::= INTEGER (1.. maxTGPS)

TGSN                         ::= INTEGER (0..14)

TimeSlot ::= INTEGER (0..14)

TimeSlotDirection ::= ENUMERATED {
    ul,

```

```

    dl,
    ...
}

TimeSlotLCR ::= INTEGER (0..6)

TimeSlotStatus ::= ENUMERATED {
    active,
    not-active,
    ...
}

TimingAdjustmentValue ::= CHOICE {
    initialPhase      INTEGER (0..255),
    steadyStatePhase  INTEGER (0..1048575)
}

TimingAdvanceApplied ::= ENUMERATED {
    yes,
    no
}
-- For 1.28Mcps TDD TimingAdvanceApplied = No

ToAWE ::= INTEGER (0..2559)
-- Unit ms

ToAWS ::= INTEGER (0..1279)
-- Unit ms

Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
SEQUENCE {
    tGPSID          TGPSID,
    tGSN            TGSN,
    tGL1            GapLength,
    tGL2            GapLength  OPTIONAL,
    tGD             TGD,
    tGPL1           GapDuration,
    tGPL2           GapDuration  OPTIONAL,
    uL-DL-mode      UL-DL-mode,
    downlink-Compressed-Mode-Method  Downlink-Compressed-Mode-Method  OPTIONAL,
    -- This IE shall be present if the UL/DL mode IE is set to "DL only" or "UL/DL"
    uplink-Compressed-Mode-Method      Uplink-Compressed-Mode-Method  OPTIONAL,
    -- This IE shall be present if the UL/DL mode IE is set to "UL only" or "UL/DL"
    dL-FrameType      DL-FrameType,
    delta-SIR1         DeltaSIR,
    delta-SIR-after1   DeltaSIR,
    delta-SIR2         DeltaSIR  OPTIONAL,
    delta-SIR-after2   DeltaSIR  OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { {Transmission-Gap-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
    ...
}

Transmission-Gap-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}

TransmissionGapPatternSequenceCodeInformation ::= ENUMERATED{
    code-change,
    nocode-change
}

Transmitted-Carrier-Power-Value ::= INTEGER(0..100)
-- According to mapping in [422]/[523]

Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in [422]/[523]

Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)

TransmissionDiversityApplied ::= BOOLEAN
-- true: applied, false: not applied

TransmitDiversityIndicator ::= ENUMERATED {
    active,
    inactive
}

TFCS ::= SEQUENCE {
    tFCSvalues CHOICE {
        no-Split-in-TFCI TFCS-TFCSList,
        split-in-TFCI SEQUENCE {
            transportFormatCombination-DCH TFCS-DCHList,
            signallingMethod CHOICE {
                tFCI-Range TFCS-MappingOnDSCHList,
                explicit TFCS-DSCHList,
                ...
            },
            iE-Extensions ProtocolExtensionContainer { { Split-in-TFCI-ExtIEs } } OPTIONAL,
            ...
        },
        ...
    },
    iE-Extensions ProtocolExtensionContainer { { TFCS-ExtIEs } } OPTIONAL,
    ...
}

Split-in-TFCI-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCS)) OF
    SEQUENCE {

```

```

    cTFC                TFCS-CTFC,
    tFC-Beta            TransportFormatCombination-Beta    OPTIONAL,
    -- The IE shall be present if the TFCS concerns a UL DPCH or PRACH channel [FDD - or PCPCH channel].
    iE-Extensions      ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs } }    OPTIONAL,
    ...
}

TFCS-TFCSList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-CTFC ::= CHOICE {
    ctfc2bit            INTEGER (0..3),
    ctfc4bit            INTEGER (0..15),
    ctfc6bit            INTEGER (0..63),
    ctfc8bit            INTEGER (0..255),
    ctfc12bit           INTEGER (0..4095),
    ctfc16bit           INTEGER (0..65535),
    ctfcmaxbit          INTEGER (0..maxCTFC)
}

TFCS-DCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI1Combs)) OF
    SEQUENCE {
        cTFC                TFCS-CTFC,
        iE-Extensions      ProtocolExtensionContainer { { TFCS-DCHList-ExtIEs } }    OPTIONAL,
        ...
    }

TFCS-DCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-MappingOnDSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCIGroups)) OF
    SEQUENCE {
        maxTFCI-field2-Value    TFCS-MaxTFCI-field2-Value,
        cTFC-DSCH                TFCS-CTFC,
        iE-Extensions            ProtocolExtensionContainer { { TFCS-MappingOnDSCHList-ExtIEs } }    OPTIONAL,
        ...
    }

TFCS-MappingOnDSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-MaxTFCI-field2-Value ::= INTEGER (1..maxNrOfTFCI2Combs-1)

TFCS-DSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
    SEQUENCE {
        cTFC-DSCH                TFCS-CTFC,
        iE-Extensions            ProtocolExtensionContainer { { TFCS-DSCHList-ExtIEs } }    OPTIONAL,
        ...
    }

```

```

TFCS-DSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportBearerRequestIndicator ::= ENUMERATED {
    bearerRequested,
    bearerNotRequested,
    ...
}

TransportFormatSet ::= SEQUENCE {
    dynamicParts          TransportFormatSet-DynamicPartList,
    semi-staticPart      TransportFormatSet-Semi-staticPart,
    iE-Extensions        ProtocolExtensionContainer { { TransportFormatSet-ExtIEs} }    OPTIONAL,
    ...
}

TransportFormatSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
SEQUENCE {
    nrOfTransportBlocks      TransportFormatSet-NrOfTransportBlocks,
    transportBlockSize      TransportFormatSet-TransportBlockSize    OPTIONAL,
    -- This IE shall be present if the Number of Transport Blocks IE is set to a value greater than 0
    mode                    TransportFormatSet-ModeDP,
    iE-Extensions          ProtocolExtensionContainer { { TransportFormatSet-DynamicPartList-ExtIEs} }    OPTIONAL,
    ...
}

TransportFormatSet-DynamicPartList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-TransportFormatSet-ModeDP ::= SEQUENCE {
    transmissionTimeIntervalInformation    TransmissionTimeIntervalInformation    OPTIONAL,
    -- This IE shall be present if the Transmission Time Interval IE in the Semi-static Transport Format Information IE is set to "dynamic"
    iE-Extensions                        ProtocolExtensionContainer { {TDD-TransportFormatSet-ModeDP-ExtIEs} }    OPTIONAL,
    ...
}

TDD-TransportFormatSet-ModeDP-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-count)) OF
SEQUENCE {
    transmissionTimeInterval          TransportFormatSet-TransmissionTimeIntervalDynamic,
    iE-Extensions                    ProtocolExtensionContainer { { TransmissionTimeIntervalInformation-ExtIEs} }    OPTIONAL,
    ...
}

```

```

TransmissionTimeIntervalInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-Semi-staticPart ::= SEQUENCE {
    transmissionTimeInterval      TransportFormatSet-TransmissionTimeIntervalSemiStatic,
    channelCoding                 TransportFormatSet-ChannelCodingType,
    codingRate                    TransportFormatSet-CodingRate                OPTIONAL,
    -- This IE shall be present if the Type of channel coding IE is set to 'convolutional' or 'turbo'
    rateMatchingAttribute        TransportFormatSet-RateMatchingAttribute,
    crcSize                      TransportFormatSet-CRC-Size,
    mode                          TransportFormatSet-ModeSSP,
    iE-Extensions                ProtocolExtensionContainer { { TransportFormatSet-Semi-staticPart-ExtIEs } }    OPTIONAL,
    ...
}

TransportFormatSet-Semi-staticPart-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-ChannelCodingType ::= ENUMERATED {
    no-codingTDD,
    convolutional-coding,
    turbo-coding,
    ...
}

TransportFormatSet-CodingRate ::= ENUMERATED {
    half,
    third,
    ...
}

TransportFormatSet-CRC-Size ::= ENUMERATED {
    v0,
    v8,
    v12,
    v16,
    v24,
    ...
}

TransportFormatSet-ModeDP ::= CHOICE {
    tdd                TDD-TransportFormatSet-ModeDP,
    notApplicable     NULL,
    ...
}

TransportFormatSet-ModeSSP ::= CHOICE {
    tdd                TransportFormatSet-SecondInterleavingMode,
    notApplicable     NULL,
    ...
}

```

```
TransportFormatSet-NrOfTransportBlocks ::= INTEGER (0..512)

TransportFormatSet-RateMatchingAttribute ::= INTEGER (1..maxRateMatching)

TransportFormatSet-SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeSlot-related,
    ...
}

TransportFormatSet-TransmissionTimeIntervalDynamic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    ...
}

TransportFormatSet-TransmissionTimeIntervalSemiStatic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    dynamic,
    ...,
    msec-5
}

TransportFormatSet-TransportBlockSize ::= INTEGER (0..5000)

TransportLayerAddress ::= BIT STRING (SIZE (1..160, ...))

TSTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

TUTRANGPS ::= SEQUENCE {
    ms-part    INTEGER (0..16383),
    ls-part    INTEGER (0..4294967295)
}

TUTRANGPSChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

TUTRANGPSDriftRate ::= INTEGER (-50..50)
-- Unit chip/s, Step 1/256 chip/s, Range -50/256..+50/256 chip/s

TUTRANGPSDriftRateQuality ::= INTEGER (0..50)
-- Unit chip/s, Step 1/256 chip/s, Range 0..50/256 chip/s

TUTRANGPSAccuracyClass ::= ENUMERATED {
```



```

    accuracy-class-A,
    accuracy-class-B,
    accuracy-class-C,
    ...
}

TUTRANGPSMeasurementThresholdInformation ::= SEQUENCE {
    tUTRANGPSChangeLimit          TUTRANGPSChangeLimit          OPTIONAL,
    predictedTUTRANGPSDeviationLimit PredictedTUTRANGPSDeviationLimit OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { TUTRANGPSMeasurementThresholdInformation-ExtIEs} } OPTIONAL,
    ...
}

TUTRANGPSMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TUTRANGPSMeasurementValueInformation ::= SEQUENCE {
    tUTRANGPS                    TUTRANGPS,
    tUTRANGPSQuality             TUTRANGPSQuality,
    tUTRANGPSDriftRate          TUTRANGPSDriftRate,
    tUTRANGPSDriftRateQuality   TUTRANGPSDriftRateQuality,
    iE-Extensions               ProtocolExtensionContainer { {TUTRANGPSMeasurementValueInformationItem-ExtIEs} } OPTIONAL,
    ...
}

TUTRANGPSMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TUTRANGPSQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip

TypeOfError ::= ENUMERATED {
    not-understood,
    missing,
    ...
}

-- =====
-- U
-- =====

UARFCN ::= INTEGER (0..16383, ...)
-- corresponds to 1885.2MHz .. 2024.8MHz

UC-Id ::= SEQUENCE {
    rNC-ID          RNC-ID,
    c-ID            C-ID,
    iE-Extensions  ProtocolExtensionContainer { {UC-Id-ExtIEs} } OPTIONAL,
    ...
}
UC-Id-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
UDRE ::= ENUMERATED {
    udre-minusequal-one-m,
    udre-betweenoneandfour-m,
    udre-betweenfourandeight-m,
    udre-greaterequaleight-m
}
UE-Capability-InformationFDD ::= SEQUENCE {
    hSDSCH-TrCH-Bits-Per-HSDSCH-TTI      ENUMERATED {v7300, v14600, v20456, v28800,...},
    hSDSCH-Multi-Code-Capability        ENUMERATED {v5, v10, v15,...},
    min-Inter-TTI-Interval              INTEGER (1..3,...),
    mAChs-Reordering-Buffer-Size        INTEGER (1..300,...),
    iE-Extensions                       ProtocolExtensionContainer { { UE-Capability-InformationFDD-ExtIEs } }    OPTIONAL,
    ...
}
UE-Capability-InformationFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
UE-Capability-InformationTDD ::= SEQUENCE {
    hsDSCHTrChBitsPerTTI                ENUMERATED { v7040, v10228, v14080, ... },
    hSDSCH-Multi-Code-Capability        ENUMERATED {v8, v12, v16,...},
    mAChs-Reordering-Buffer-Size        INTEGER (1..300,...),
    iE-Extensions                       ProtocolExtensionContainer { { UE-Capability-InformationTDD-ExtIEs } }    OPTIONAL,
    ...
}
UE-Capability-InformationTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
UL-CapacityCredit ::= INTEGER (0..65535)
UL-DL-mode ::= ENUMERATED {
    ul-only,
    dl-only,
    both-ul-and-dl
}
Uplink-Compressed-Mode-Method ::= ENUMERATED {
    sFdiv2,
    higher-layer-scheduling,
    ...
}
UL-Timeslot-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationItem
UL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot          TimeSlot,

```

```

midambleShiftAndBurstType      MidambleShiftAndBurstType,
tFCI-Presence                  TFCI-Presence,
uL-Code-InformationList        TDD-UL-Code-Information,
iE-Extensions                  ProtocolExtensionContainer { { UL-Timeslot-InformationItem-ExtIEs } }    OPTIONAL,
...
}

UL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-TimeslotLCR-InformationItem

UL-TimeslotLCR-InformationItem ::= SEQUENCE {
timeSlotLCR                    TimeSlotLCR,
midambleShiftLCR              MidambleShiftLCR,
tFCI-Presence                  TFCI-Presence,
uL-Code-InformationList        TDD-UL-Code-LCR-Information,
iE-Extensions                  ProtocolExtensionContainer { { UL-TimeslotLCR-InformationItem-ExtIEs } }    OPTIONAL,
...
}

UL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-DPCCH-SlotFormat ::= INTEGER (0..5,...)

UL-SIR ::= INTEGER (-82..173)
-- According to mapping in [16]

UL-FP-Mode ::= ENUMERATED {
normal,
silent,
...
}

UL-PhysCH-SF-Variation ::= ENUMERATED {
sf-variation-supported,
sf-variation-not-supported
}

UL-ScramblingCode ::= SEQUENCE {
uL-ScramblingCodeNumber        UL-ScramblingCodeNumber,
uL-ScramblingCodeLength        UL-ScramblingCodeLength,
iE-Extensions                  ProtocolExtensionContainer { { UL-ScramblingCode-ExtIEs } }    OPTIONAL,
...
}

UL-ScramblingCode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

UL-ScramblingCodeNumber ::= INTEGER (0..16777215)

UL-ScramblingCodeLength ::= ENUMERATED {
    short,
    long
}

UL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-TimeSlot-ISCP-InfoItem

UL-TimeSlot-ISCP-InfoItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    iSCP                    UL-TimeslotISCP-Value,
    iE-Extensions          ProtocolExtensionContainer { { UL-TimeSlot-ISCP-InfoItem-ExtIEs } } OPTIONAL,
    ...
}

UL-TimeSlot-ISCP-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeSlot-ISCP-LCR-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-TimeSlot-ISCP-LCR-InfoItem

UL-TimeSlot-ISCP-LCR-InfoItem ::= SEQUENCE {
    timeSlotLCR            TimeSlotLCR,
    iSCP                  UL-TimeslotISCP-Value,
    iE-Extensions        ProtocolExtensionContainer { { UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs } } OPTIONAL,
    ...
}

UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-Information ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationItem

USCH-InformationItem ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    cCTrCH-ID             CCTrCH-ID,
    transportFormatSet    TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    iE-Extensions        ProtocolExtensionContainer { { USCH-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

USCH-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID          CRITICALITY ignore     EXTENSION BindingID      PRESENCE optional }|
    { ID id-transportlayeraddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
    ...
}

USCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationResponseItem

USCH-InformationResponseItem ::= SEQUENCE {

```

```

    uSCH-ID          USCH-ID,
    bindingID        BindingID          OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
    iE-Extensions    ProtocolExtensionContainer { { USCH-InformationResponseItem-ExtIEs } } OPTIONAL,
    ...
}

USCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeslotISCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]

UL-TimeslotISCP-Value-IncrDecrThres ::= INTEGER (0..126)

USCH-ID ::= INTEGER (0..255)

-- =====
-- V
-- =====

-- =====
-- W
-- =====

-- =====
-- X
-- =====

-- =====
-- Y
-- =====

-- =====
-- Z
-- =====

END

```

9.3.5 Common Definitions

```

-- *****
--
-- Common definitions
--
-- *****

NBAP-CommonDataTypes {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-CommonDataTypes (3) }

```

```
DEFINITIONS AUTOMATIC TAGS ::=
```

```
BEGIN
```

```
-- *****
```

```
--
```

```
-- Extension constants
```

```
--
```

```
-- *****
```

```
maxPrivateIEs          INTEGER ::= 65535
```

```
maxProtocolExtensions  INTEGER ::= 65535
```

```
maxProtocolIEs        INTEGER ::= 65535
```

```
-- *****
```

```
--
```

```
-- Common Data Types
```

```
--
```

```
-- *****
```

```
Criticality           ::= ENUMERATED { reject, ignore, notify }
```

```
MessageDiscriminator  ::= ENUMERATED { common, dedicated }
```

```
Presence              ::= ENUMERATED { optional, conditional, mandatory }
```

```
PrivateIE-ID          ::= CHOICE {  
    local              INTEGER (0..maxPrivateIEs),  
    global              OBJECT IDENTIFIER  
}
```

```
ProcedureCode         ::= INTEGER (0..255)
```

```
ProcedureID           ::= SEQUENCE {  
    procedureCode      ProcedureCode,  
    ddMode              ENUMERATED { tdd, fdd, common, ... }  
}
```

```
ProtocolIE-ID         ::= INTEGER (0..maxProtocolIEs)
```

```
TransactionID         ::= CHOICE {  
    shortTransactionId INTEGER (0..127),  
    longTransactionId  INTEGER (0..32767)  
}
```

```
TriggeringMessage     ::= ENUMERATED { initiating-message, successful-outcome, unsuccessful-outcome, outcome }
```

```
END
```

9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****

NBAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Constants (4)}

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    ProcedureCode,
    ProtocolIE-ID
FROM NBAP-CommonDataTypes;

-- *****
--
-- Elementary Procedures
--
-- *****

id-audit                               ProcedureCode ::= 0
id-auditRequired                       ProcedureCode ::= 1
id-blockResource                       ProcedureCode ::= 2
id-cellDeletion                        ProcedureCode ::= 3
id-cellReconfiguration                 ProcedureCode ::= 4
id-cellSetup                           ProcedureCode ::= 5
id-cellSynchronisationInitiation       ProcedureCode ::= 45
id-cellSynchronisationReconfiguration  ProcedureCode ::= 46
id-cellSynchronisationReporting        ProcedureCode ::= 47
id-cellSynchronisationTermination      ProcedureCode ::= 48
id-cellSynchronisationFailure          ProcedureCode ::= 49
id-commonMeasurementFailure            ProcedureCode ::= 6
id-commonMeasurementInitiation         ProcedureCode ::= 7
id-commonMeasurementReport             ProcedureCode ::= 8
id-commonMeasurementTermination        ProcedureCode ::= 9
id-commonTransportChannelDelete        ProcedureCode ::= 10
id-commonTransportChannelReconfigure   ProcedureCode ::= 11
id-commonTransportChannelSetup         ProcedureCode ::= 12
id-compressedModeCommand               ProcedureCode ::= 14
id-dedicatedMeasurementFailure         ProcedureCode ::= 16
id-dedicatedMeasurementInitiation      ProcedureCode ::= 17
id-dedicatedMeasurementReport          ProcedureCode ::= 18
id-dedicatedMeasurementTermination     ProcedureCode ::= 19
id-downlinkPowerControl                ProcedureCode ::= 20
id-downlinkPowerTimeslotControl        ProcedureCode ::= 38

```

```

id-errorIndicationForCommon      ProcedureCode ::= 35
id-errorIndicationForDedicated    ProcedureCode ::= 21
id-informationExchangeFailure     ProcedureCode ::= 40
id-informationExchangeInitiation  ProcedureCode ::= 41
id-informationExchangeTermination ProcedureCode ::= 42
id-informationReporting           ProcedureCode ::= 43
id-BearerRearrangement           ProcedureCode ::= 50
id-physicalSharedChannelReconfiguration ProcedureCode ::= 37
id-privateMessageForCommon       ProcedureCode ::= 36
id-privateMessageForDedicated    ProcedureCode ::= 22
id-radioLinkAddition             ProcedureCode ::= 23
id-radioLinkDeletion             ProcedureCode ::= 24
id-radioLinkFailure              ProcedureCode ::= 25
id-radioLinkPreemption           ProcedureCode ::= 39
id-radioLinkRestoration          ProcedureCode ::= 26
id-radioLinkSetup                ProcedureCode ::= 27
id-reset                         ProcedureCode ::= 13
id-resourceStatusIndication      ProcedureCode ::= 28
id-cellSynchronisationAdjustment ProcedureCode ::= 44
id-synchronisedRadioLinkReconfigurationCancellation ProcedureCode ::= 29
id-synchronisedRadioLinkReconfigurationCommit ProcedureCode ::= 30
id-synchronisedRadioLinkReconfigurationPreparation ProcedureCode ::= 31
id-systemInformationUpdate       ProcedureCode ::= 32
id-unblockResource              ProcedureCode ::= 33
id-unSynchronisedRadioLinkReconfiguration ProcedureCode ::= 34
id-radioLinkActivation           ProcedureCode ::= 51

```

```

-- *****
--
-- Lists
--
-- *****

```

```

maxNrOfCodes          INTEGER ::= 10
maxNrOfDLTSS          INTEGER ::= 15
maxNrOfDLTSLCRs       INTEGER ::= 6
maxNrOfErrors         INTEGER ::= 256
maxNrOfTFs            INTEGER ::= 32
maxNrOfTFCs           INTEGER ::= 1024
maxNrOfRLLs           INTEGER ::= 16
maxNrOfRLLs-1         INTEGER ::= 15 -- maxNrOfRLLs - 1
maxNrOfRLLs-2         INTEGER ::= 14 -- maxNrOfRLLs - 2
maxNrOfRLLSets        INTEGER ::= maxNrOfRLLs
maxNrOfDPCHs          INTEGER ::= 240
maxNrOfDPCHLCRs       INTEGER ::= 240
maxNrOfSCCPCHs        INTEGER ::= 8
maxNrOfCPCHs          INTEGER ::= 16
maxNrOfPCPCHs         INTEGER ::= 64
maxNrOfDCHs           INTEGER ::= 128
maxNrOfDSCHs          INTEGER ::= 32
maxNrOfFACHs          INTEGER ::= 8
maxNrOfCCTrCHs        INTEGER ::= 16
maxNrOfPDSCHs         INTEGER ::= 256

```



```

maxNrOfPUSCHs                INTEGER ::= 256
maxNrOfPDSCHSets             INTEGER ::= 256
maxNrOfPRACHLCRs             INTEGER ::= 8
maxNrOfPUSCHSets             INTEGER ::= 256
maxNrOfSCCPCHLCRs           INTEGER ::= 8
maxNrOfULTSs                 INTEGER ::= 15
maxNrOfULTSLCRs              INTEGER ::= 6
maxNrOfUSCHs                 INTEGER ::= 32
maxAPSigNum                   INTEGER ::= 16
maxNrOfSlotFormatsPRACH     INTEGER ::= 8
maxCellInNodeB                INTEGER ::= 256
maxCCPinNodeB                 INTEGER ::= 256
maxCPCHCell                   INTEGER ::= maxNrOfCPCHs
maxCTFC                       INTEGER ::= 16777215
maxLocalCellInNodeB          INTEGER ::= maxCellInNodeB
maxNoofLen                     INTEGER ::= 7
maxFPACHCell                  INTEGER ::= 8
maxRACHCell                   INTEGER ::= maxPRACHCell
maxPRACHCell                  INTEGER ::= 16
maxPCPCHCell                  INTEGER ::= 64
maxSCCPCHCell                 INTEGER ::= 32
maxSCPICHCell                 INTEGER ::= 32
maxTTI-count                  INTEGER ::= 4
maxIBSEG                      INTEGER ::= 16
maxIB                          INTEGER ::= 64
maxFACHCell                   INTEGER ::= 256 -- maxNrOfFACHs * maxSCCPCHCell
maxRateMatching               INTEGER ::= 256
maxCodeNrComp-1              INTEGER ::= 256
maxNrOfCellSyncBursts        INTEGER ::= 10
maxNrOfCodeGroups             INTEGER ::= 256
maxNrOfReceptsPerSyncFrame    INTEGER ::= 16
maxNrOfMeasNCell              INTEGER ::= 96
maxNrOfMeasNCell-1           INTEGER ::= 95 -- maxNrOfMeasNCell - 1
maxNrOfTFCIGroups            INTEGER ::= 256
maxNrOfTFCI1Combs             INTEGER ::= 512
maxNrOfTFCI2Combs            INTEGER ::= 1024
maxNrOfTFCI2Combs-1          INTEGER ::= 1023
maxNrOfSF                     INTEGER ::= 8
maxTGPS                       INTEGER ::= 6
maxCommunicationContext       INTEGER ::= 1048575
maxNrOfLevels                 INTEGER ::= 256
maxNoSat                      INTEGER ::= 16
maxNoGPSItems                 INTEGER ::= 8
maxNrOfHSSCCHs               INTEGER ::= 32
maxNoOfSyncFramesLCR         INTEGER ::= 512
maxNrofReceptionsperSyncFrameLCR  INTEGER ::= 8
maxNrOfHSSCCHCodes           INTEGER ::= 128
maxNrOfMACdFlows              INTEGER ::= 8
maxNrOfMACdFlows-1           INTEGER ::= 7 -- maxNrOfMACdFlows - 1
maxNrOfMACdPDUIndexes         INTEGER ::= 8
maxNrOfMACdPDUIndexes-1      INTEGER ::= 7 -- maxNoOfMACdPDUIndexes - 1
maxNrOfPriorityQueues         INTEGER ::= 8
maxNrOfPriorityQueues-1       INTEGER ::= 7 -- maxNoOfPriorityQueues - 1

```

maxNrOfHARQProcesses INTEGER ::= 8

```
-- *****
--
-- IEs
--
-- *****
```

id-AICH-Information	ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 1
id-BCH-Information	ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 8
id-BCCH-ModificationTime	ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator	ProtocolIE-ID ::= 10
id-Cause	ProtocolIE-ID ::= 13
id-CCP-InformationItem-AuditRsp	ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp	ProtocolIE-ID ::= 15
id-CCP-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 19
id-CellParameterID	ProtocolIE-ID ::= 23
id-CFN	ProtocolIE-ID ::= 24
id-C-ID	ProtocolIE-ID ::= 25
id-CommonMeasurementAccuracy	ProtocolIE-ID ::= 39
id-CommonMeasurementObjectType-CM-Rprt	ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst	ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp	ProtocolIE-ID ::= 33
id-CommonMeasurementType	ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID	ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 37
id-CommunicationControlPortID	ProtocolIE-ID ::= 40
id-ConfigurationGenerationID	ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID	ProtocolIE-ID ::= 44
id-CriticalityDiagnostics	ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD	ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD	ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 54
id-DCH-DeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 55
id-DCH-FDD-Information	ProtocolIE-ID ::= 56
id-DCH-TDD-Information	ProtocolIE-ID ::= 57
id-DCH-InformationResponse	ProtocolIE-ID ::= 59
id-FDD-DCHs-to-Modify	ProtocolIE-ID ::= 62
id-TDD-DCHs-to-Modify	ProtocolIE-ID ::= 63
id-DCH-ModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 65
id-DCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 135
id-DedicatedMeasurementObjectType-DM-Rprt	ProtocolIE-ID ::= 67
id-DedicatedMeasurementObjectType-DM-Rqst	ProtocolIE-ID ::= 68
id-DedicatedMeasurementObjectType-DM-Rsp	ProtocolIE-ID ::= 69

id-DedicatedMeasurementType	ProtocolIE-ID ::= 70
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 72
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 73
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 76
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 79
id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 83
id-DL-DPCH-TimingAdjustment	ProtocolIE-ID ::= 21
id-DL-ReferencePowerInformationItem-DL-PC-Rqst	ProtocolIE-ID ::= 84
id-DLReferencePower	ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 86
id-DSCH-AddItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 87
id-DSCHs-to-Add-FDD	ProtocolIE-ID ::= 89
id-DSCH-DeleteItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 91
id-DSCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 100
id-DSCH-InformationResponse	ProtocolIE-ID ::= 105
id-DSCH-FDD-Information	ProtocolIE-ID ::= 106
id-DSCH-TDD-Information	ProtocolIE-ID ::= 107
id-DSCH-ModifyItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 108
id-DSCH-ModifyList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 112
id-DSCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 136
id-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 113
id-FACH-Information	ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd	ProtocolIE-ID ::= 123
id-Local-Cell-ID	ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 128
id-AdjustmentPeriod	ProtocolIE-ID ::= 129
id-MaxAdjustmentStep	ProtocolIE-ID ::= 130
id-MaximumTransmissionPower	ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 132
id-MeasurementID	ProtocolIE-ID ::= 133
id-MessageStructure	ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst	ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID	ProtocolIE-ID ::= 143
id-NeighbouringCellMeasurementInformation	ProtocolIE-ID ::= 455
id-P-CCPCH-Information	ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 145

id-P-CPICH-Information	ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 147
id-P-SCH-Information	ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 156
id-PCH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 157
id-PCH-Information	ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 165
id-PICH-Information	ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 168
id-PowerAdjustmentType	ProtocolIE-ID ::= 169
id-PRACH-Information	ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 176
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 189
id-RACH-Information	ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 197
id-ReportCharacteristics	ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD	ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRqst	ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRqstFDD	ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRqstFDD	ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRqst	ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 214

id-RL-InformationList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 215
id-RL-InformationList-RL-SetupRqstFDD	ProtocolIE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady	ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-ReconfRsp	ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 221
id-RL-InformationResponseList-RL-ReconfReady	ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-ReconfRsp	ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 225
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 228
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 229
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure	ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 241
id-RL-Set-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 242
id-S-CCPCH-Information	ProtocolIE-ID ::= 247
id-S-CPICH-Information	ProtocolIE-ID ::= 249
id-SCH-Information	ProtocolIE-ID ::= 251
id-S-SCH-Information	ProtocolIE-ID ::= 253
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD	ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD	ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 264
id-SecondarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate	ProtocolIE-ID ::= 266
id-SFN	ProtocolIE-ID ::= 268
id-SignallingBearerRequestIndicator	ProtocolIE-ID ::= 138
id-ShutdownTimer	ProtocolIE-ID ::= 269
id-Start-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 114
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 270
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 271
id-SyncCase	ProtocolIE-ID ::= 274
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH	ProtocolIE-ID ::= 275
id-T-Cell	ProtocolIE-ID ::= 276
id-TargetCommunicationControlPortID	ProtocolIE-ID ::= 139
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 277
id-TimeSlotConfigurationList-Cell-SetupRqstTDD	ProtocolIE-ID ::= 278
id-TransmissionDiversityApplied	ProtocolIE-ID ::= 279
id-TypeOfError	ProtocolIE-ID ::= 508
id-UARFCNforNt	ProtocolIE-ID ::= 280
id-UARFCNforNd	ProtocolIE-ID ::= 281
id-UARFCNforNu	ProtocolIE-ID ::= 282
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 284

id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 285
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 288
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 289
id-UL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 291
id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 293
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 294
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 295
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 296
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 297
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD	ProtocolIE-ID ::= 300
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD	ProtocolIE-ID ::= 301
id-USCH-Information-Add	ProtocolIE-ID ::= 302
id-USCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 304
id-USCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 306
id-USCH-InformationResponse	ProtocolIE-ID ::= 309
id-USCH-Information	ProtocolIE-ID ::= 310
id-USCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 141
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 315
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 316
id-AdjustmentRatio	ProtocolIE-ID ::= 317
id-AP-AICH-Information	ProtocolIE-ID ::= 320
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 323
id-CauseLevel-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 324
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 329
id-CDCA-ICH-Information	ProtocolIE-ID ::= 330
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode	ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag	ProtocolIE-ID ::= 335
id-CPCH-Information	ProtocolIE-ID ::= 336
id-CPCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 342
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count	ProtocolIE-ID ::= 358
id-DPC-Mode	ProtocolIE-ID ::= 450
id-DPCHConstant	ProtocolIE-ID ::= 359
id-DSCH-FDD-Common-Information	ProtocolIE-ID ::= 94
id-EnhancedDSCHPC	ProtocolIE-ID ::= 110

id-EnhancedDSCHPCIndicator	ProtocolIE-ID ::= 111
id-FACH-ParametersList-CTCH-SetupRsp	ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 375
id-PCPCH-Information	ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 380
id-PRACHConstant	ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 383
id-PUSCHConstant	ProtocolIE-ID ::= 384
id-RACH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 385
id-SSDT-CellIDforEDSCHPC	ProtocolIE-ID ::= 443
id-Synchronisation-Configuration-Cell-ReconfRqst	ProtocolIE-ID ::= 393
id-Synchronisation-Configuration-Cell-SetupRqst	ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 398
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 403
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 407
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 408
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 409
id-CommunicationContextInfoItem-Reset	ProtocolIE-ID ::= 412
id-CommunicationControlPortInfoItem-Reset	ProtocolIE-ID ::= 414
id-ResetIndicator	ProtocolIE-ID ::= 416
id-TFCI2-Bearer-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 417
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD	ProtocolIE-ID ::= 418
id-TFCI2-BearerInformationResponse	ProtocolIE-ID ::= 419
id-TFCI2BearerRequestIndicator	ProtocolIE-ID ::= 142
id-TimingAdvanceApplied	ProtocolIE-ID ::= 287
id-CFNReportingIndicator	ProtocolIE-ID ::= 6
id-SFNReportingIndicator	ProtocolIE-ID ::= 11
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 12
id-TimeslotISCPInfo	ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 47
id-CauseLevel-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 420
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 421
id-CellAdjustmentInfoItem-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 494
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 482
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 422
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 423
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 424
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 425
id-CellSyncBurstTransInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 426

id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 427
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 428
id-CellSyncInfo-CellSyncReprtTDD	ProtocolIE-ID ::= 429
id-CSBTransmissionID	ProtocolIE-ID ::= 430
id-CSBMeasurementID	ProtocolIE-ID ::= 431
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 432
id-NCyclesPerSFNperiod	ProtocolIE-ID ::= 433
id-NRepetitionsPerCyclePeriod	ProtocolIE-ID ::= 434
id-SyncFrameNumber	ProtocolIE-ID ::= 437
id-SynchronisationReportType	ProtocolIE-ID ::= 438
id-SynchronisationReportCharacteristics	ProtocolIE-ID ::= 439
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 440
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 119
id-ReferenceClockAvailability	ProtocolIE-ID ::= 435
id-ReferenceSFNoffset	ProtocolIE-ID ::= 436
id-InformationExchangeID	ProtocolIE-ID ::= 444
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 445
id-InformationType	ProtocolIE-ID ::= 446
id-InformationReportCharacteristics	ProtocolIE-ID ::= 447
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 448
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 449
id-IPDLParameter-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 451
id-IPDLParameter-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 452
id-IPDLParameter-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 453
id-IPDLParameter-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 454
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 74
id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 75
id-DwPCH-LCR-Information	ProtocolIE-ID ::= 78
id-DwPCH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 80
id-DwPCH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 90
id-DwPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 97
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 99
id-DwPCH-LCR-Information-ResourceStatusInd	ProtocolIE-ID ::= 101
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 154
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 174
id-FPACH-LCR-Information	ProtocolIE-ID ::= 290
id-FPACH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 292
id-FPACH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 22
id-FPACH-LCR-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 311
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 312
id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 313
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 314
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 456
id-PCH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 457
id-PCH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 458
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 459
id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 460
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 461
id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 462
id-RL-InformationResponse-LCR-RL-SetupRspTDD	ProtocolIE-ID ::= 463
id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 464
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 465
id-TimeSlot	ProtocolIE-ID ::= 495

id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 466
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 467
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD	ProtocolIE-ID ::= 468
id-TimeSlotLCR-CM-Rqst	ProtocolIE-ID ::= 469
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 470
id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 471
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 472
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 473
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 474
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 475
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 476
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 477
id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 478
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 479
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD	ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationModify-AddList	ProtocolIE-ID ::= 483
id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 484
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 485
id-UL-SIRTarget	ProtocolIE-ID ::= 510
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 486
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 487
id-PDSCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 26
id-PDSCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 27
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 488
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 489
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 490
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 491
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 493
id-timeslotInfo-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 496
id-SyncReportType-CellSyncReprtTDD	ProtocolIE-ID ::= 497
id-Power-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 498
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 499
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 500
id-Power-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 501
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 502
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd	ProtocolIE-ID ::= 503
id-Power-Local-Cell-Group-ID	ProtocolIE-ID ::= 504
id-PUSCH-Info-DM-Rqst	ProtocolIE-ID ::= 505
id-PUSCH-Info-DM-Rsp	ProtocolIE-ID ::= 506
id-PUSCH-Info-DM-Rprt	ProtocolIE-ID ::= 507
id-InitDL-Power	ProtocolIE-ID ::= 509
id-cellSyncBurstRepetitionPeriod	ProtocolIE-ID ::= 511
id-ReportCharacteristicsType-OnModification	ProtocolIE-ID ::= 512
id-SFNFSNMeasurementValueInformation	ProtocolIE-ID ::= 513
id-SFNFSNMeasurementThresholdInformation	ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation	ProtocolIE-ID ::= 515
id-TUTRANGPSMeasurementThresholdInformation	ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 520
id-RL-InformationResponse-LCR-RL-AdditionRspTDD	ProtocolIE-ID ::= 51
id-DL-PowerBalancing-Information	ProtocolIE-ID ::= 28
id-DL-PowerBalancing-ActivationIndicator	ProtocolIE-ID ::= 29

id-DL-PowerBalancing-UpdatedIndicator	ProtocolIE-ID ::= 30
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD	ProtocolIE-ID ::= 517
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD	ProtocolIE-ID ::= 518
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD	ProtocolIE-ID ::= 519
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 41
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 42
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst	ProtocolIE-ID ::= 522
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst	ProtocolIE-ID ::= 523
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 524
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 525
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 526
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 527
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 528
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 529
id-bindingID	ProtocolIE-ID ::= xxx
id-RL-Specific-DCH-Info	ProtocolIE-ID ::= xxx
id-transportlayeraddress	ProtocolIE-ID ::= xxx
id-DelayedActivation	ProtocolIE-ID ::= 231
id-DelayedActivationList-RL-ActivationCmdFDD	ProtocolIE-ID ::= 232
id-DelayedActivationInformation-RL-ActivationCmdFDD	ProtocolIE-ID ::= 233
id-DelayedActivationList-RL-ActivationCmdTDD	ProtocolIE-ID ::= 234
id-DelayedActivationInformation-RL-ActivationCmdTDD	ProtocolIE-ID ::= 235
id-neighbouringTDDCellMeasurementInformationLCR	ProtocolIE-ID ::= 58
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 543
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 544
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 545
id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 546
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 547
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD	ProtocolIE-ID ::= 548
id-SyncDLCodeIdThreInfoLCR	ProtocolIE-ID ::= 549
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 550
id-DwPCH-Power	ProtocolIE-ID ::= 551
id-Angle-Of-Arrival-Value-LCR	ProtocolIE-ID ::= 521
id-HSDSCH-FDD-Information	ProtocolIE-ID ::= 530
id-HSDSCH-FDD-Information-Response	ProtocolIE-ID ::= 531
id-HSDSCH-FDD-Information-to-Add	ProtocolIE-ID ::= 532
id-HSDSCH-FDD-Information-to-Delete	ProtocolIE-ID ::= 533
id-HSDSCH-Information-to-Modify	ProtocolIE-ID ::= 534
id-HSDSCH-RNTI	ProtocolIE-ID ::= 535
id-HSDSCH-TDD-Information	ProtocolIE-ID ::= 536
id-HSDSCH-TDD-Information-Response	ProtocolIE-ID ::= 537
id-HSDSCH-TDD-Information-Response-LCR	ProtocolIE-ID ::= 538
id-HSDSCH-TDD-Information-to-Add	ProtocolIE-ID ::= 539
id-HSDSCH-TDD-Information-to-Delete	ProtocolIE-ID ::= 540
id-HSPDSCH-RL-ID	ProtocolIE-ID ::= 541
id-PrimCCPCH-RSCP-DL-PC-RqstTDD	ProtocolIE-ID ::= 542

END

9.3.7 Container Definitions

```

-- *****
--
-- Container definitions
--
-- *****

NBAP-Containers {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Containers (5) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    maxProtocolExtensions,
    maxPrivateIEs,
    maxProtocolIEs,
    Criticality,
    Presence,
    PrivateIE-ID,
    ProtocolIE-ID
FROM NBAP-CommonDataTypes;

-- *****
--
-- Class Definition for Protocol IEs
--
-- *****

NBAP-PROTOCOL-IES ::= CLASS {
    &id      ProtocolIE-ID          UNIQUE,
    &criticality  Criticality,
    &Value,
    &presence  Presence
}
WITH SYNTAX {
    ID      &id
    CRITICALITY &criticality
    TYPE      &Value
    PRESENCE  &presence
}

-- *****

```

```

--
-- Class Definition for Protocol IEs
--
-- *****

NBAP-PROTOCOL-IES-PAIR ::= CLASS {
    &id          ProtocolIE-ID          UNIQUE,
    &firstCriticality  Criticality,
    &FirstValue,
    &secondCriticality  Criticality,
    &SecondValue,
    &presence          Presence
}
WITH SYNTAX {
    ID          &id
    FIRST CRITICALITY  &firstCriticality
    FIRST TYPE        &FirstValue
    SECOND CRITICALITY &secondCriticality
    SECOND TYPE       &SecondValue
    PRESENCE         &presence
}

-- *****
--
-- Class Definition for Protocol Extensions
--
-- *****

NBAP-PROTOCOL-EXTENSION ::= CLASS {
    &id          ProtocolIE-ID          UNIQUE,
    &criticality  Criticality,
    &Extension,
    &presence          Presence
}
WITH SYNTAX {
    ID          &id
    CRITICALITY &criticality
    EXTENSION   &Extension
    PRESENCE    &presence
}

-- *****
--
-- Class Definition for Private IEs
--
-- *****

NBAP-PRIVATE-IES ::= CLASS {
    &id          PrivateIE-ID,
    &criticality  Criticality,
    &Value,
    &presence          Presence
}

```

```

WITH SYNTAX {
  ID      &id
  CRITICALITY &criticality
  TYPE     &Value
  PRESENCE  &presence
}

-- *****
--
-- Container for Protocol IEs
--
-- *****

ProtocolIE-Container {NBAP-PROTOCOL-IES : IEsSetParam} ::=
  SEQUENCE (SIZE (0..maxProtocolIEs)) OF
  ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Single-Container {NBAP-PROTOCOL-IES : IEsSetParam} ::=
  ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Field {NBAP-PROTOCOL-IES : IEsSetParam} ::= SEQUENCE {
  id          NBAP-PROTOCOL-IES.&id          ({IEsSetParam}),
  criticality NBAP-PROTOCOL-IES.&criticality ({IEsSetParam}{@id}),
  value       NBAP-PROTOCOL-IES.&Value      ({IEsSetParam}{@id})
}

-- *****
--
-- Container for Protocol IE Pairs
--
-- *****

ProtocolIE-ContainerPair {NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=
  SEQUENCE (SIZE (0..maxProtocolIEs)) OF
  ProtocolIE-FieldPair {{IEsSetParam}}

ProtocolIE-FieldPair {NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::= SEQUENCE {
  id          NBAP-PROTOCOL-IES-PAIR.&id          ({IEsSetParam}),
  firstCriticality NBAP-PROTOCOL-IES-PAIR.&firstCriticality ({IEsSetParam}{@id}),
  firstValue      NBAP-PROTOCOL-IES-PAIR.&FirstValue  ({IEsSetParam}{@id}),
  secondCriticality NBAP-PROTOCOL-IES-PAIR.&secondCriticality ({IEsSetParam}{@id}),
  secondValue     NBAP-PROTOCOL-IES-PAIR.&SecondValue ({IEsSetParam}{@id})
}

-- *****
--
-- Container Lists for Protocol IE Containers
--
-- *****

ProtocolIE-ContainerList {INTEGER : lowerBound, INTEGER : upperBound, NBAP-PROTOCOL-IES : IEsSetParam} ::=
  SEQUENCE (SIZE (lowerBound..upperBound)) OF
  ProtocolIE-Container {{IEsSetParam}}

```

```
ProtocolIE-ContainerPairList {INTEGER : lowerBound, INTEGER : upperBound, NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=
  SEQUENCE (SIZE (lowerBound..upperBound)) OF
  ProtocolIE-ContainerPair {{IEsSetParam}}

-- *****
--
-- Container for Protocol Extensions
--
-- *****

ProtocolExtensionContainer {NBAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::=
  SEQUENCE (SIZE (1..maxProtocolExtensions)) OF
  ProtocolExtensionField {{ExtensionSetParam}}

ProtocolExtensionField {NBAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::= SEQUENCE {
  id          NBAP-PROTOCOL-EXTENSION.&id ({ExtensionSetParam}),
  criticality NBAP-PROTOCOL-EXTENSION.&criticality ({ExtensionSetParam}@id)},
  extensionValue NBAP-PROTOCOL-EXTENSION.&Extension ({ExtensionSetParam}@id)
}

-- *****
--
-- Container for Private IEs
--
-- *****

PrivateIE-Container {NBAP-PRIVATE-IES : IEsSetParam} ::=
  SEQUENCE (SIZE (1..maxPrivateIEs)) OF
  PrivateIE-Field {{IEsSetParam}}

PrivateIE-Field {NBAP-PRIVATE-IES : IEsSetParam} ::= SEQUENCE {
  id          NBAP-PRIVATE-IES.&id
  ({IEsSetParam}),
  criticality NBAP-PRIVATE-IES.&criticality
  ({IEsSetParam}@id)},
  value      NBAP-PRIVATE-IES.&Value
  ({IEsSetParam}@id)
}

END
```

9.4 Message Transfer Syntax

NBAP shall use the ASN.1 Basic Packed Encoding Rules (BASIC-PER) Aligned Variant as transfer syntax as specified in ref. [11].

The following encoding rules apply in addition to what has been specified in X.691 [11]:

When a bitstring value is placed in a bit-field as specified in 15.6 to 15.11 in [11], the leading bit of the bitstring value shall be placed in the leading bit of the bit-field, and the trailing bit of the bitstring value shall be placed in the trailing bit of the bit-field.

NOTE - When using the "bstring" notation, the leading bit of the bitstring value is on the left, and the trailing bit of the bitstring value is on the right. The term 'leading bit' is to be interpreted as equal to the term 'first bit' defined in [12].

9.5 Timers

$T_{Preempt}$

- Specifies the maximum time that a Node B may wait for pre-emption of resources for establishment or reconfiguration of Radio Links.

10 Handling of Unknown, Unforeseen and Erroneous Protocol Data

10.1 General

Protocol Error cases can be divided into three classes:

- Transfer Syntax Error
- Abstract Syntax Error
- Logical Error

Protocol errors can occur in the following functions within a receiving node:

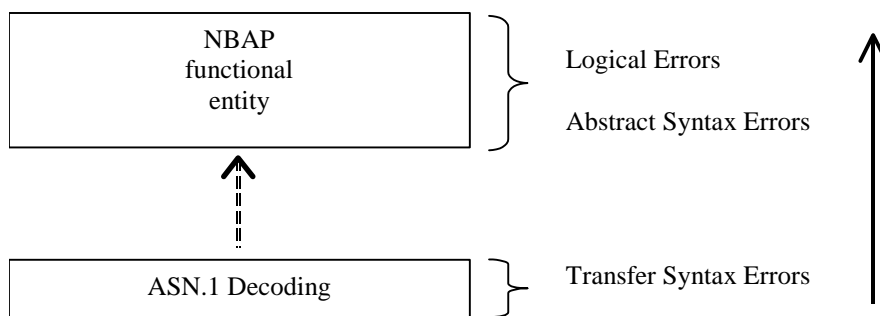


Figure 38: Protocol Errors in NBAP.

The information stated in subclauses 10.2, 10.3 and 10.4, to be included in the message used when reporting an error, is what at minimum shall be included. Other optional information elements within the message may also be included, if available. This is also valid for the case when the reporting is done with a response message. The latter is an exception to what is stated in subclause 4.1.

10.2 Transfer Syntax Error

A Transfer Syntax Error occurs when the receiver is not able to decode the received physical message. Transfer syntax errors are always detected in the process of ASN.1 decoding. If a Transfer Syntax Error occurs, the receiver should initiate Error Indication procedure with appropriate cause value for the Transfer Syntax protocol error.

Examples for Transfer Syntax Errors are:

- Violation of value ranges in ASN.1 definition of messages. e.g.: If an IE has a defined value range of 0 to 10 (ASN.1: INTEGER (0..10)), and 12 will be received, then this will be treated as a transfer syntax error.
- Violation in list element constraints. e.g.: If a list is defined as containing 1 to 10 elements, and 12 elements will be received, then this case will be handled as a transfer syntax error.
- Missing mandatory elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).
- Wrong order of elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).

10.3 Abstract Syntax Error

10.3.1 General

An Abstract Syntax Error occurs when the receiving functional NBAP entity:

1. receives IEs or IE groups that cannot be understood (unknown id);
2. receives IEs for which the logical range is violated (e.g.: ASN.1 definition: 0 to 15, the logical range is 0 to 10 (values 11 to 15 are undefined), and 12 will be received; this case will be handled as an abstract syntax error using criticality information sent by the originator of the message);
3. does not receive IEs or IE groups but according to the specified presence of the **concerningconcerned** object, the IEs or IE groups should have been present in the received message;
4. receives IEs or IE groups that are defined to be part of that message in wrong order or with too many occurrences of the same IE or IE group;
5. receives IEs or IE groups but according to the conditional presence of the **concerningconcerned** object and the specified condition, the IEs or IE groups should not have been present in the received message.

Cases 1 and 2 (not comprehended IE/IE group) are handled based on received Criticality information. Case 3 (missing IE/IE group) is handled based on Criticality information and Presence information for the missing IE/IE group specified in the version of the specification used by the receiver. Case 4 (IEs or IE groups in wrong order or with too many occurrences) and Case 5 (erroneously present conditional IEs or IE groups) result in rejecting the procedure.

If an Abstract Syntax Error occurs, the receiver shall read the remaining message and shall then for each detected Abstract Syntax Error that belong to cases 1-3 act according to the Criticality Information and Presence Information for the IE/IE group due to which Abstract Syntax Error occurred in accordance with subclauses 10.3.4 and 10.3.5. The handling of cases 4 and 5 is specified in subclause 10.3.6.

10.3.2 Criticality Information

In the NBAP messages there is criticality information set for individual IEs and/or IE groups. This criticality information instructs the receiver how to act when receiving an IE or an IE group that is not comprehended, i.e. the entire item (IE or IE group) which is not (fully or partially) comprehended shall be treated in accordance with its own criticality information as specified in subclause 10.3.4.

In addition, the criticality information is used in case of the missing IE/IE group abstract syntax error (see subclause 10.3.5).

The receiving node shall take different actions depending on the value of the Criticality Information. The three possible values of the Criticality Information for an IE/IE group are:

- Reject IE
- Ignore IE and Notify Sender
- Ignore IE

The following rules restrict when a receiving entity may consider an IE, an IE group or an EP not comprehended (not implemented), and when action based on criticality information is applicable:

1. IE or IE group: When one new or modified IE or IE group is implemented for one EP from a standard version, then other new or modified IEs or IE groups specified for that EP in that standard version shall be considered comprehended by the receiving entity (some may still remain unsupported).

Note that this restriction is applicable to a sending entity for constructing messages.

2. EP: The comprehension of different EPs within a standard version or between different standard versions is not mandated. Any EP that is not supported may be considered not comprehended, even if another EP from that standard version is comprehended, and action based on criticality shall be applied.

When the criticality information cannot even be decoded in a not comprehended IE or IE group, the Error Indication procedure shall be initiated with an appropriate cause value.

10.3.3 Presence Information

For many IEs/IE groups which are optional according to the ASN.1 transfer syntax, NBAP specifies separately if the presence of these IEs/IE groups is optional or mandatory with respect to RNS application by means of the presence field of the ~~concerning~~concerned object of class NBAP-PROTOCOL-IES, NBAP-PROTOCOL-IES-PAIR, NBAP-PROTOCOL-EXTENSION or NBAP-PRIVATE-IES.

The presence field of the indicated classes supports three values:

1. Optional;
2. Conditional;
3. Mandatory.

If an IE/IE group is not included in a received message and the presence of the IE/IE group is mandatory or the presence is conditional and the condition is true according to the version of the specification used by the receiver, an abstract syntax error occurs due to a missing IE/IE group.

If an IE/IE group is included in a received message and the presence of the IE/IE group is conditional and the condition is false according to the version of the specification used by the receiver, an abstract syntax error occurs due to this erroneously present conditional IE/IE group.

10.3.4 Not comprehended IE/IE group

10.3.4.1 Procedure ID

The receiving node shall treat the different types of received criticality information of the *Procedure ID* according to the following:

Reject IE:

- If a message is received with a *Procedure ID* marked with "*Reject IE*" which the receiving node does not comprehend, the receiving node shall reject the procedure using the Error Indication procedure.

Ignore IE and Notify Sender:

- If a message is received with a *Procedure ID* marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the procedure and initiate the Error Indication procedure.

Ignore IE:

- If a message is received with a *Procedure ID* marked with "Ignore IE" which the receiving node does not comprehend, the receiving node shall ignore the procedure.

When using the Error Indication procedure to reject a procedure or to report an ignored procedure it shall include the *Procedure ID* IE, the *Triggering Message* IE, and the *Procedure Criticality* IE in the *Criticality Diagnostics* IE.

10.3.4.1A Type of Message

When the receiving node cannot decode the *Type of Message* IE, the Error Indication procedure shall be initiated with an appropriate cause value.

10.3.4.2 IEs other than the Procedure ID and Type of Message

The receiving node shall treat the different types of received criticality information of an IE/IE group other than the *Procedure ID* according to the following:

Reject IE:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "Reject IE" which the receiving node does not comprehend; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the rejection of one or more IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report unsuccessful outcome is received containing one or more IEs/IE groups marked with "Reject IE" which the receiving node does not comprehend, the receiving node shall terminate the procedure and initiate the Error Indication procedure.
- If a *response* message is received containing one or more IEs/IE groups marked with "Reject IE" that the receiving node does not comprehend, the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

Ignore IE and Notify Sender:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "Ignore IE and Notify Sender" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups and report in the response message of the procedure that one or more IEs/IE groups have been ignored. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the response message, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report the outcome of the procedure is received containing one or more IEs/IE groups marked with "Ignore IE and Notify Sender" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups, and initiate the Error Indication procedure to report that one or more IEs/IE groups have been ignored.
- If a *response* message is received containing one or more IEs/IE groups marked with "Ignore IE and Notify Sender" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups and initiate the Error Indication procedure.

Ignore IE:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "Ignore IE" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and continue with the procedure as if the not comprehended IEs/IE groups were not received using the understood IEs/IE groups.

- If a *response* message is received containing one or more IEs/IE groups marked with "*Ignore IE*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and continue with the procedure as if the not comprehended IEs/IE groups were not received using the understood IEs/IE groups.

When reporting not comprehended IEs/IE groups marked with "*Reject IE*" or "*Ignore IE and Notify Sender*" using a response message defined for the procedure, the *Information Element Criticality Diagnostics* IE shall be included in the *Criticality Diagnostics* IE for each reported IE/IE group. In the *Information Element Criticality Diagnostics* IE the *Repetition Number* IE shall be included and in addition, if the not comprehended IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure* IE shall be included.

When reporting not comprehended IEs/IE groups marked with "*Reject IE*" or "*Ignore IE and Notify Sender*" using the Error Indication procedure, the *Procedure ID* IE, the *Triggering Message* IE, *Procedure Criticality* IE, the *Transaction ID* IE, and the *Information Element Criticality Diagnostics* IE shall be included in the *Criticality Diagnostics* IE for each reported IE/IE group. In the *Information Element Criticality Diagnostics* IE the *Repetition Number* IE shall be included and in addition, if the not comprehended IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure* IE shall be included.

10.3.5 Missing IE or IE gGroup

The receiving node shall treat the missing IE/IE group according to the criticality information for the missing IE/IE group in the received message specified in the version of this specification used by the receiver:

Reject IE:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Reject IE*"; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the missing IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a received message *initiating* a procedure that does not have a message to report unsuccessful outcome is missing one or more IEs/IE groups with specified criticality "*Reject IE*", the receiving node shall terminate the procedure and initiate the Error Indication procedure.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "*Reject IE*", the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

Ignore IE and Notify Sender:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and report in the response message of the procedure that one or more IEs/IE groups were missing. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the response message, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a received message *initiating* a procedure that does not have a message to report the outcome of the procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and initiate the Error Indication procedure to report that one or more IEs/IE groups were missing.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and initiate the Error Indication procedure to report that one or more IEs/IE groups were missing.

Ignore IE:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "*Ignore IE*", the receiving node shall ignore that those IEs/IE groups are missing and continue with the procedure based on the other IEs/IE groups present in the message.

When reporting missing IEs/IE groups with specified criticality "*Reject IE*" or "*Ignore IE and Notify Sender*" using a response message defined for the procedure, the *Information Element Criticality Diagnostics* IE shall be included in the *Criticality Diagnostics* IE for each reported IE/IE group. In the *Information Element Criticality Diagnostics* IE, the *Repetition Number* IE shall be included and in addition, if the missing IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure* IE shall be included.

When reporting missing IEs/IE groups with specified criticality "*Reject IE*" or "*Ignore IE and Notify Sender*" using the Error Indication procedure, the *Procedure ID* IE, the *Triggering Message* IE, *Procedure Criticality* IE, the *Transaction ID* IE, and the *Information Element Criticality Diagnostics* IE shall be included in the *Criticality Diagnostics* IE for each reported IE/IE group. In the *Information Element Criticality Diagnostics* IE, the *Repetition Number* IE shall be included and in addition, if the missing IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure* IE shall be included.

10.3.6 IEs or IE groups Received in Wrong Order or With Too Many Occurrences or Erroneously Present

If a message with IEs or IE groups in wrong order or with too many occurrences is received or if IEs or IE groups with a conditional presence are present when the condition is not met (i.e. erroneously present), the receiving node shall behave according to the following:

- If a message *initiating* a procedure is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the cause value "Abstract Syntax Error (Falsely Constructed Message)" using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report unsuccessful outcome is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, the receiving node shall terminate the procedure and initiate the Error Indication procedure, and use cause value "Abstract Syntax Error (Falsely Constructed Message)".
- If a *response* message is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

When determining the correct order only the IEs specified in the specification version used by the receiver shall be considered.

10.4 Logical Error

Logical error situations occur when a message is comprehended correctly, but the information contained within the message is not valid (i.e. semantic error), or describes a procedure which is not compatible with the state of the receiver. In these conditions, the following behaviour shall be performed (unless otherwise specified) as defined by the class of the elementary procedure, irrespective of the criticality of the IEs/IE groups containing the erroneous values.

Class 1:

Where the logical error occurs in a request message of a class 1 procedure, and the procedure has a failure message, the failure message shall be sent with an appropriate cause value.

Typical cause values are:

- Protocol Causes:
 1. Semantic Error
 2. Message not compatible with receiver state

Where the logical error is contained in a request message of a class 1 procedure, and the procedure does not have a failure message, the procedure shall be terminated and the ERROR INDICATION procedure shall be initiated with an appropriate cause value. The *Procedure ID IE*, the *Triggering Message IE* and the *Transaction ID IE* within the *Criticality Diagnostics IE* shall then be included in order to identify the message containing the logical error.

Where the logical error exists in a response message of a class 1 procedure, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.

Class 2:

Where the logical error occurs in a message of a class 2 procedure, the procedure shall be terminated and the ERROR INDICATION procedure shall be initiated with an appropriate cause value. The *Procedure ID IE*, the *Triggering Message IE* and the *Transaction ID IE* within the *Criticality Diagnostics IE* shall then be included in order to identify the message containing the logical error.

10.5 Exceptions

The error handling for all the cases described hereafter shall take precedence over any other error handling described in the other subclause of clause 10.

- If any type of error (Transfer Syntax Error, Abstract Syntax Error or Logical Error) is detected in the ERROR INDICATION message, it shall not trigger the Error Indication procedure in the receiving Node but local error handling.
- In case a response message, failure message or ERROR INDICATION message needs to be returned, but the information necessary to determine the receiver of that message is missing, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.

Annex A (normative): Allocation and Pre-emption of Radio Links in the Node B

A.1 Deriving Allocation Information for a Radio Link

A.1.1 Establishment of a New Radio Link

The Allocation Information for a Radio Link in the case of establishment of a new Radio Link shall be derived as follows:

- The latest received *Allocation/Retention Priority* IE for each transport channel shall be used.

Note: The *Allocation/Retention Priority* IE for a transport channel may have been received in

- a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B or
- b) a procedure adding or modifying the transport channel.

- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all transport channels that are intended to use the Radio Link is set to "no priority", the pre-emption capability of the Radio Link shall be set to "shall not trigger pre-emption".
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more of the transport channels that are intended to use the Radio Link is not set to "no priority", the allocation priority and the pre-emption capability of the Radio Link shall be set according to the following:
 - The transport channels that have the *Priority Level* IE in the *Allocation/Retention Priority* IE set to "no priority" shall be excluded when setting the allocation priority and pre-emption capability of a Radio Link.
 - The allocation priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all non excluded transport channels that are intended to use the Radio Link.
 - If all non-excluded transport channels that are intended to use a Radio Link to be established have the pre-emption capability, given by the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE, set to "shall not trigger pre-emption", the pre-emption capability of the Radio Link shall be set to "shall not trigger pre-emption".
If one or more non-excluded transport channels that are intended to use the Radio Link to be established have the value of the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE set to "may trigger pre-emption", the pre-emption capability of the Radio Link shall be set to "may trigger pre-emption".

The derived allocation priority and pre-emption capability are only valid during this allocation/retention process.

A.1.2 Modification of an Existing Radio Link

The Allocation Information for a Radio Link in the case of modification of a Radio Link (addition or modification of transport channels using the Radio Link) shall be derived as follows:

- The latest received *Allocation/Retention Priority* IE for each transport channel shall be used.

Note: The *Allocation/Retention Priority* IE for a transport channel may have been received in

- a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B,
- b) a previous procedure adding or modifying the transport channel, or
- c) the current procedure adding or modifying the transport channel.

- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all transport channels to be added or modified in the Radio Link is set to "no priority", the pre-emption capability of the Radio Link to be modified shall be set to "shall not trigger pre-emption".

- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more of the transport channels to be added or modified in the Radio Link is not set to “no priority”, the allocation priority of and the pre-emption capability of the Radio Link to be modified shall be set according to the following:
 - The transport channels to be added or modified that have the *Priority Level* IE in the *Allocation/Retention Priority* IE set to “no priority” shall be excluded when setting the allocation priority and pre-emption capability of a Radio Link to be modified.
 - The allocation priority for a Radio Link to be modified shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all the non-excluded transport channels that are to be added or modified.
 - If all non-excluded transport channels that are to be added or modified in the Radio Link have the pre-emption capability, given by the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE, set to “shall not trigger pre-emption”, the pre-emption capability of the Radio Link to be modified shall be set to “shall not trigger pre-emption”.
If one or more of the non-excluded transport channels to be added or modified in the Radio Link have the value of the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE set to “may trigger pre-emption”, the pre-emption capability of the Radio Link to be modified shall be set to “may trigger pre-emption”.

The derived allocation priority and pre-emption capability are only valid during this allocation/retention process.

A.2 Deriving Retention Information for a Radio Link

The Retention Information for an existing Radio Link shall be derived as follows:

- The latest received *Allocation/Retention Priority* IE for each transport channel shall be used.
- Note: The *Allocation/Retention Priority* IE for a transport channel may have been received in
- a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B or
 - b) a procedure adding or modifying the transport channel.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more transport channels using the Radio Link is set to “no priority”, the pre-emption vulnerability of the Radio Link shall be set to “not pre-emptable”.
 - If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all the transport channels using the Radio Link is not set to “no priority”, the retention priority of the Radio Link and the pre-emption vulnerability of the Radio Link shall be set according to the following:
 - The retention priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all transport channels that uses the Radio Link.
 - If all transport channels that uses the Radio Link have the pre-emption vulnerability, given by the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE, set to “pre-emptable”, the pre-emption vulnerability of the Radio Link shall be set to “pre-emptable”.
If one or more transport channels that uses the Radio Link have the value of the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE set to “not pre-emptable”, the pre-emption vulnerability of the Radio Link shall be set to “not pre-emptable”.

The derived retention priority and pre-emption vulnerability are valid until they are changed, or until the Radio Link is deleted. When new transport channels are added to or deleted from the Radio Link or when existing transport channels are modified with regards to the *Allocation/Retention Priority* IE, the retention information shall be derived again according to above.

A.3 The Allocation/Retention Process

The Node B shall establish or modify the resources for a Radio Link according to:

- The value of the Allocation Information (allocation priority and pre-emption capability) of the Radio Link to be established or modified. The Allocation Information is derived according to clause A.1.
- The value of the Retention Information (retention priority and pre-emption vulnerability) of existing Radio Links. The Retention Information derived according to clause A.2.
- The resource situation in the cell.

Whilst the process and the extent of the pre-emption functionality is operator dependent, the pre-emption indicators (pre-emption capability and pre-emption vulnerability) shall be treated as follows:

- If the pre-emption capability for a Radio Link to be established or modified is set to "may trigger pre-emption" and the resource situation so requires, the Node B may trigger the pre-emption process in clause A.4 to free resources for this allocation request.
- If the pre-emption capability for a Radio Link to be established or modified is set to `"shall not trigger pre-emption"`, then this allocation request shall not trigger the pre-emption process in clause A.4.
- If the pre-emption vulnerability for an existing Radio Link is set to `"pre-emptable"`, then this Radio Link shall be included in the pre-emption process in clause A.4.
- If the pre-emption vulnerability for an existing Radio Link is set to `"not pre-emptable"`, then this Radio Link shall not be included in the pre-emption process in clause A.4.

A.4 The Pre-emption Process

The pre-emption process shall only pre-empt Radio Links with lower retention priority than the allocation priority of the Radio Link to be established or modified. The Radio Links to be pre-empted shall be selected in ascending order of the retention priority.

When the pre-emption process detects that one or more Radio Links have to be pre-empted to free resources for a Radio Link(s) to be established or modified, the Node B shall initiate the Radio Link Pre-emption procedure for all the Node B Communication Contexts having Radio Links selected for pre-emption and start the T_{Preempt} timer.

When enough resources are freed to establish or modify the Radio Link(s) according to the request, the Node B shall stop the T_{Preempt} timer and complete the procedure that triggered the pre-emption process in accordance with the `"Successful Operation"` subclause of the procedure.

If the T_{Preempt} timer expires, the Node B shall regard the procedure that triggered the pre-emption process as failed and complete the procedure in accordance with the `"Unsuccessful Operation"` subclause of the procedure.

Annex B (informative): Measurement Reporting

When the *Report Characteristics* IE is set to "Event A" (figure B.1), the Measurement Reporting procedure is initiated when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

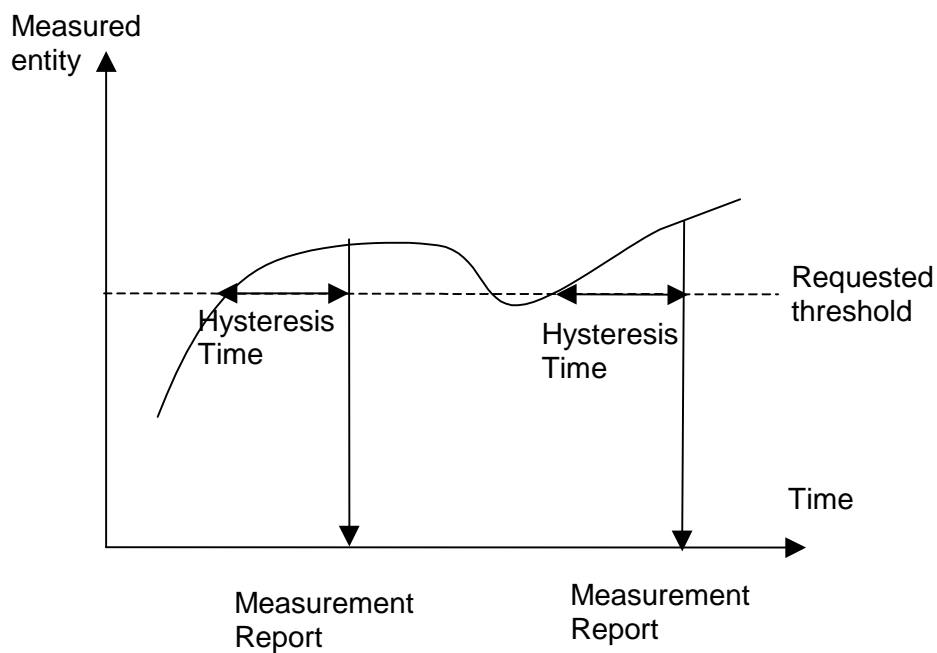


Figure B.1: Event A reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to "Event B" (figure B.2), the Measurement Reporting procedure is initiated when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

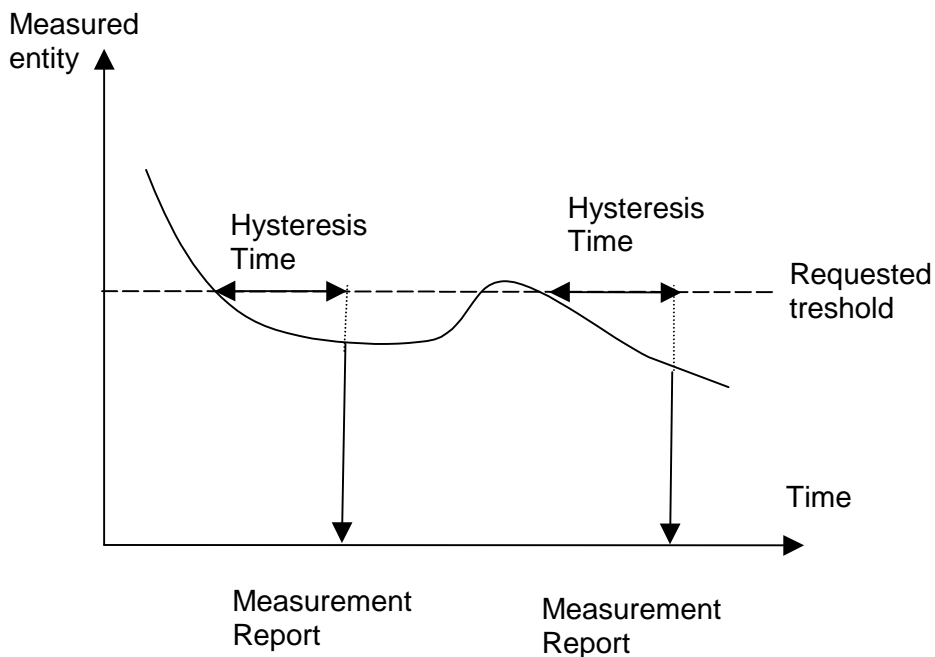


Figure B.2: Event B reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to "Event C" (figure B.3), the Measurement Reporting procedure is initiated always when the measured entity rises by an amount greater than the requested threshold within the requested time. The reporting in figure B.3 is initiated if the Rising Time T1 is less than the requested time.

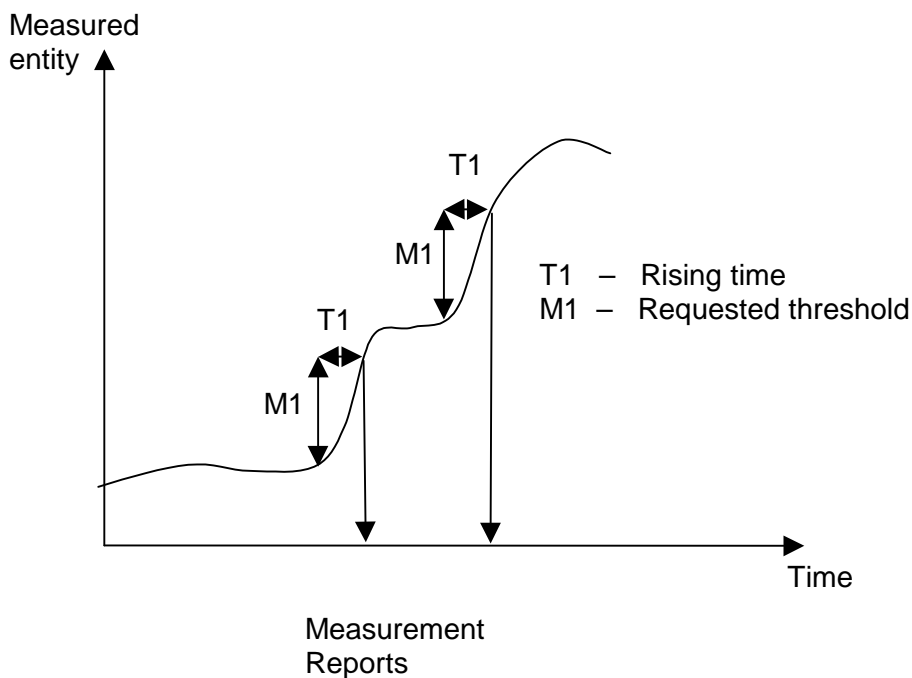


Figure B.3: Event C reporting

When the *Report Characteristics* IE is set to "Event D" (figure B.4), the Measurement Reporting procedure is initiated always when the measured entity falls by an amount greater than the requested threshold within the requested time. The reporting in figure B.4 is initiated if the Falling Time T1 is less than the requested time.

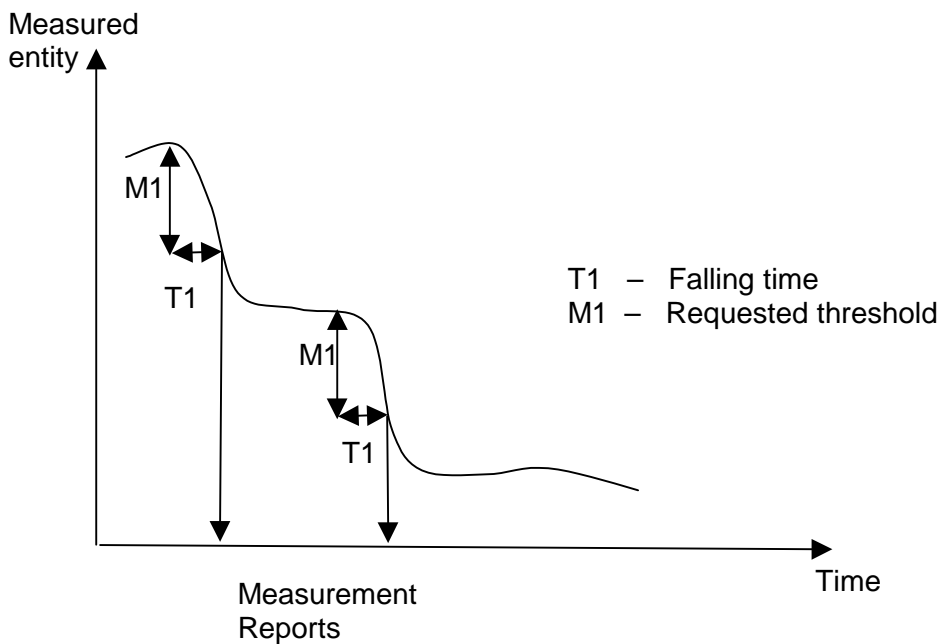


Figure B.4: Event D reporting

When the *Report Characteristics* IE is set to "Event E" (figure B.5), the Measurement Reporting procedure (Report A) is initiated always when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (T1 in figure B.5). If *Report Periodicity* IE is provided Node B shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity falls below the 'Measurement Threshold 1' and is terminated by the Report B.

When the Report A conditions have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time' (T1) Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.

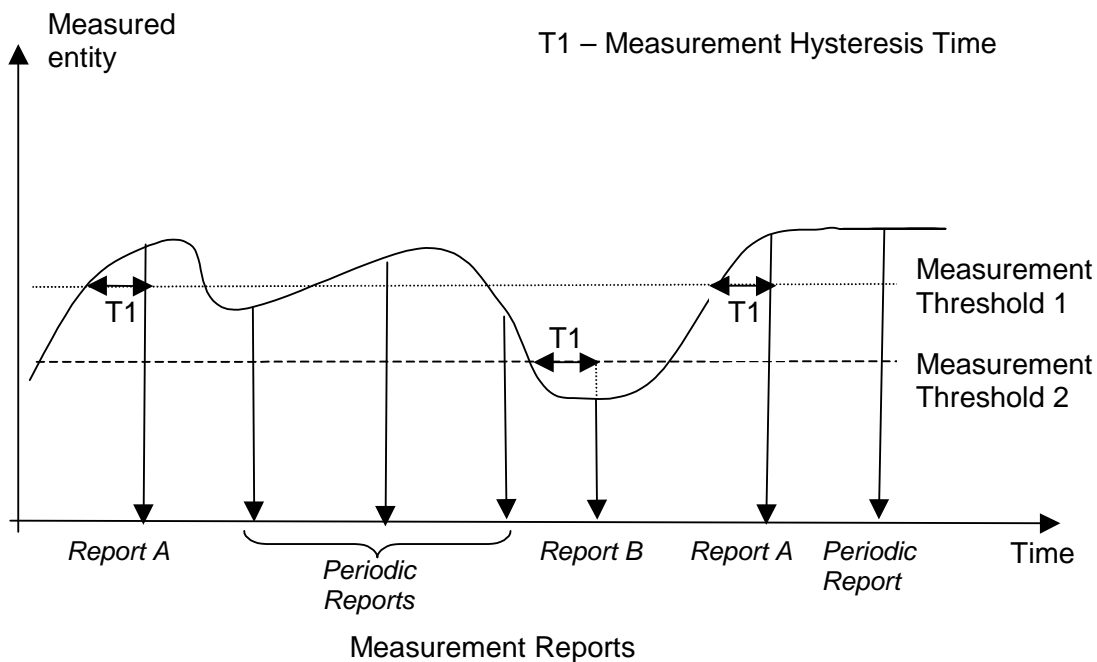


Figure B.5: Event E reporting with Hysteresis Time specified and Periodic Reporting requested

When the *Report Characteristics* IE is set to "Event F" (figure B.6), the Measurement Reporting procedure (Report A) is initiated always when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (T1 in figure B.6). If *Report Periodicity* IE is provided Node B shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity rises above the 'Measurement Threshold 1' and is terminated by the Report B.

When the Report A conditions have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time' (T1) Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.

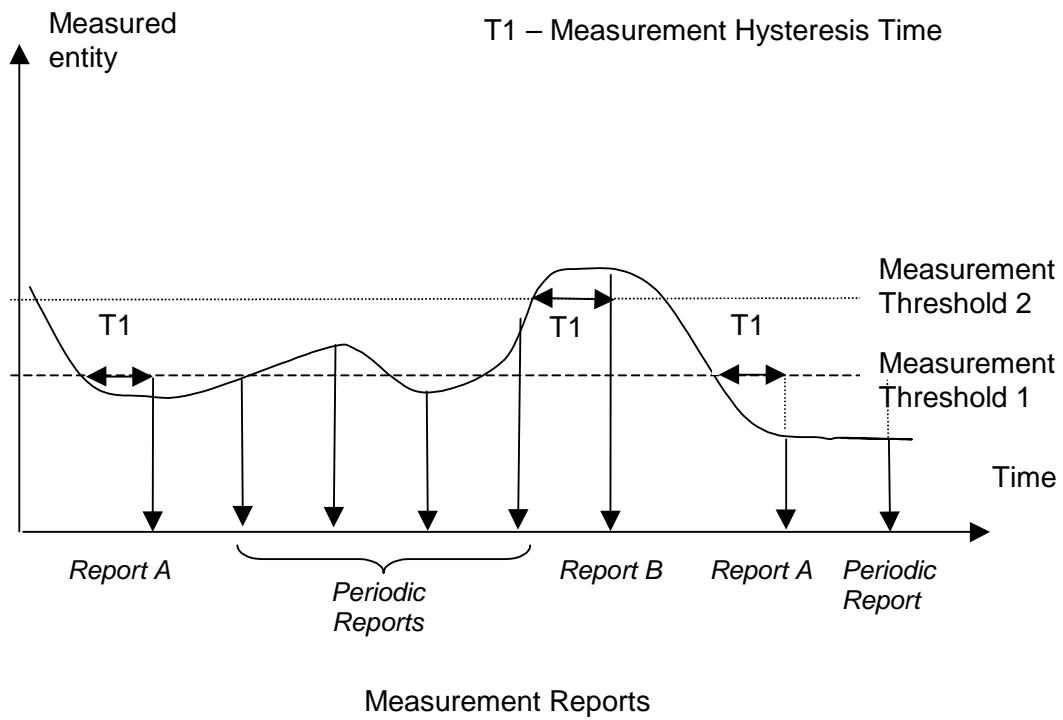


Figure B.6: Event F reporting with Hysteresis Time specified and Periodic Reporting requested

Annex C (informative): Guidelines for Usage of the Criticality Diagnostics IE

C.1 EXAMPLE MESSAGE Layout

Assume the following message format:

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
A	M				YES	reject
B	M				YES	reject
>E		1..<maxE>			EACH	ignore
>>F		1..<maxF>			–	
>>>G		0..3, ...			EACH	ignore
>>H		1..<maxH>			EACH	ignore
>>>G		0..3, ...			EACH	ignore and notify
>>G	M				YES	reject
>>J		1..<maxJ>			–	
>>>G		0..3, ...			EACH	reject
C	M				YES	reject
>K		1..<maxK>			EACH	ignore and notify
>>L		1..<maxL>			–	
>>>M	O				–	
D	M				YES	reject

Note 1. The IEs F, J, and L do not have assigned criticality. The IEs F, J, and L are consequently realised as the ASN.1 type SEQUENCE OF of "ordinary" ASN.1 type, e.g. INTEGER. On the other hand, the repeatable IEs with assigned criticality are realised as the ASN.1 type SEQUENCE OF of an IE object, e.g. ProtocolIE-Single-Container.

For the corresponding ASN.1 layout, see subclause C.4.

C.2 Example on a Received EXAMPLE MESSAGE

Assume further more that a received message based on the above tabular format is according to the figure below.

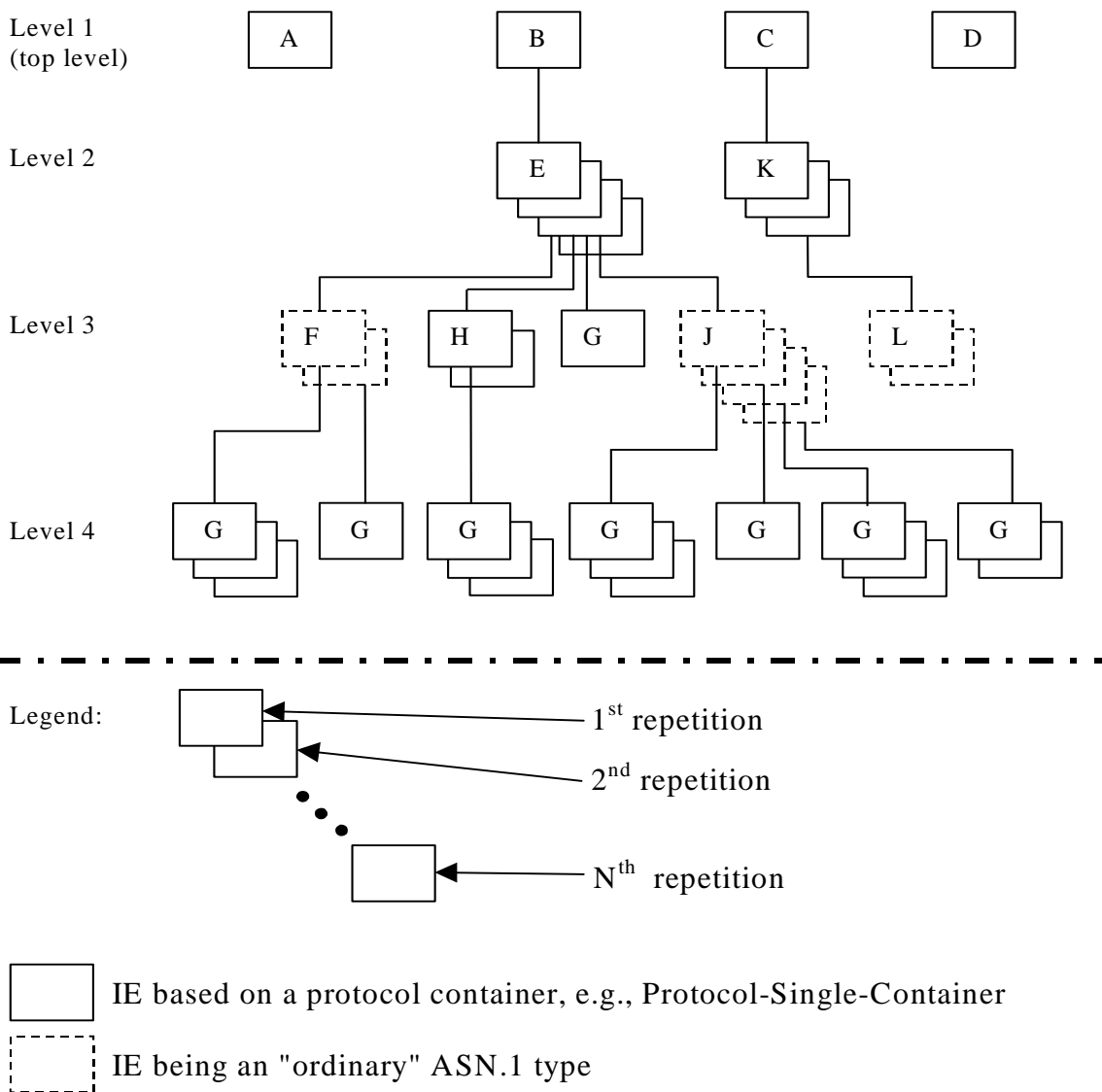
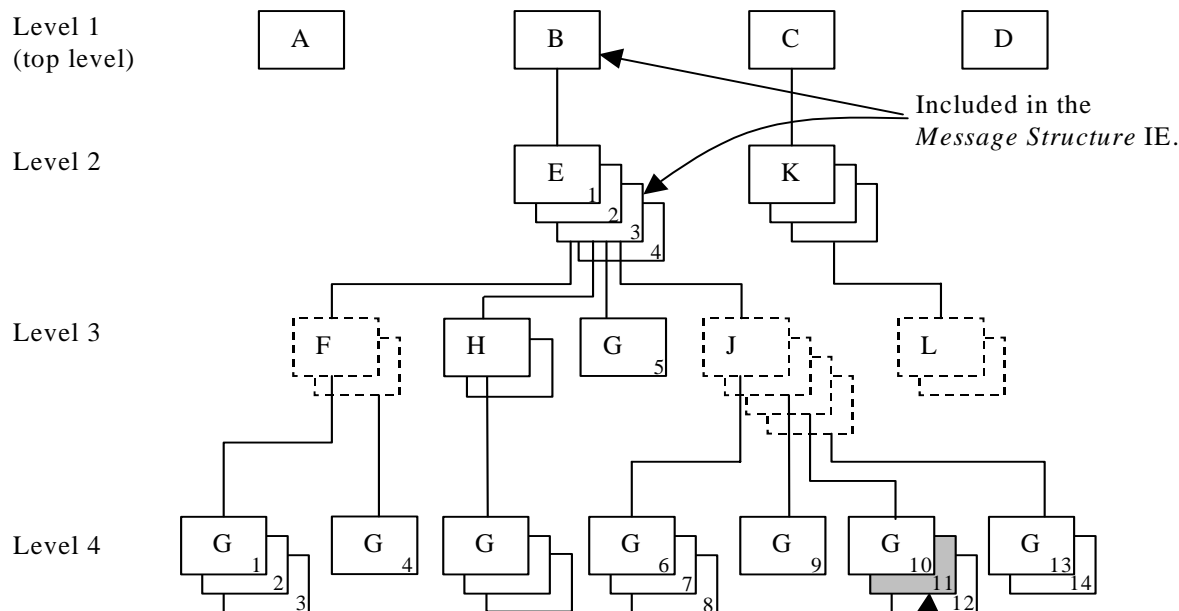


Figure C.1: Example of content of a received NBAP message based on the EXAMPLE MESSAGE

C.3 Content of Criticality Diagnostics

C.3.1 Example 1



Included in the *Information Element Criticality Diagnostics* IE:

- a) *IE ID* IE
- b) *Repetition Number* IE

Figure C.2: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE J shown in the figure C.2 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 4.
IE ID	id-G	IE ID from the reported level, i.e. level 4.
Repetition Number	11	Repetition number on the reported level, i.e. level 4. (Since the IE E (level 2) is the lowest level included in the <i>Message Structure</i> IE this is the eleventh occurrence of IE G within the IE E (level 2).)
Type of Error	not understood	
<i>Message Structure, first repetition</i>		
>IE ID	id-B	IE ID from level 1.
<i>Message Structure, second repetition</i>		
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.
>Repetition Number	3	Repetition number from the lowest level above the reported level, i.e. level 2.

Note 2. The IE J on level 3 cannot be included in the *Message Structure* IE since they have no criticality of their own.

Note 3. The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

C.3.2 Example 2

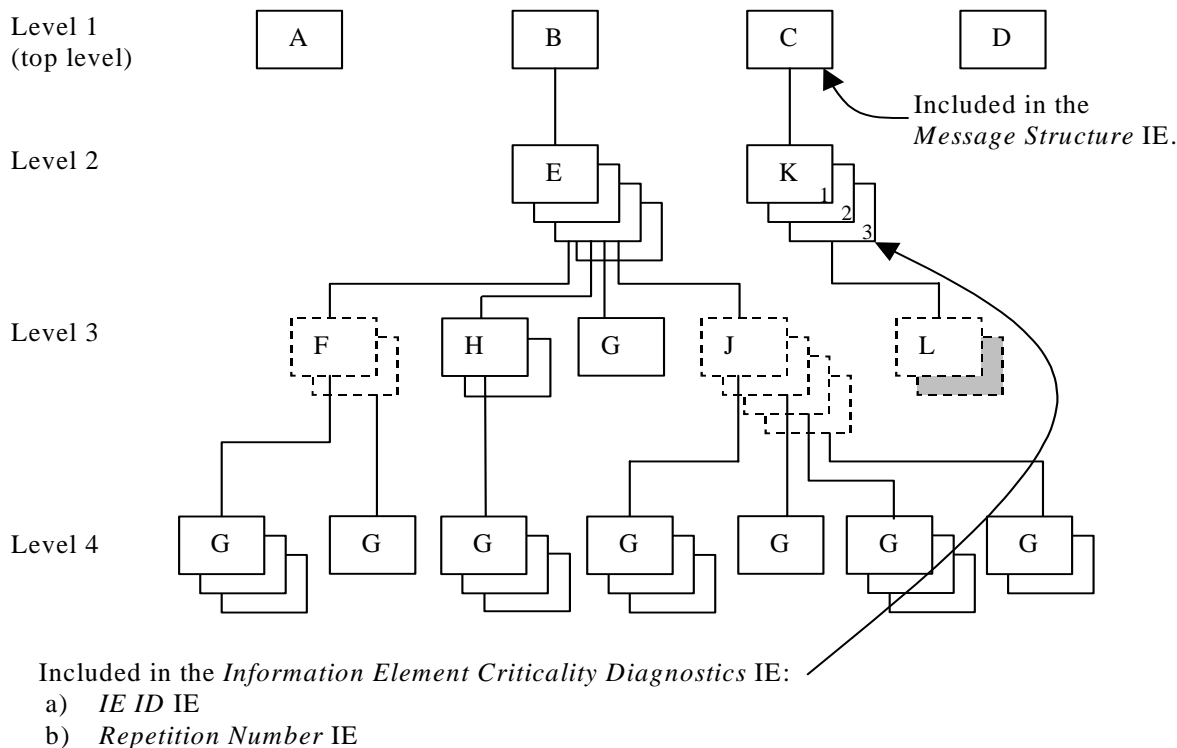


Figure C.3: Example of a received NBAP message containing a not comprehended IE

If there is an error within the second instance (marked as grey) in the sequence (IE L in the tabular format) on level 3 below IE K in the structure shown in the figure C.3 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	ignore and notify	Criticality for IE on the reported level, i.e. level 2.
IE ID	id-K	IE ID from the reported level, i.e. level 2.
Repetition Number	3	Repetition number on the reported level, i.e. level 2.
Type of Error	not understood	
<i>Message Structure, first repetition</i>		
>IE ID	id-C	IE ID from the lowest level above the reported level, i.e. level 1.

Note 4. The IE L on level 3 cannot be reported individually included in the *Message Structure* IE since it has no criticality of its own.

C.3.3 Example 3

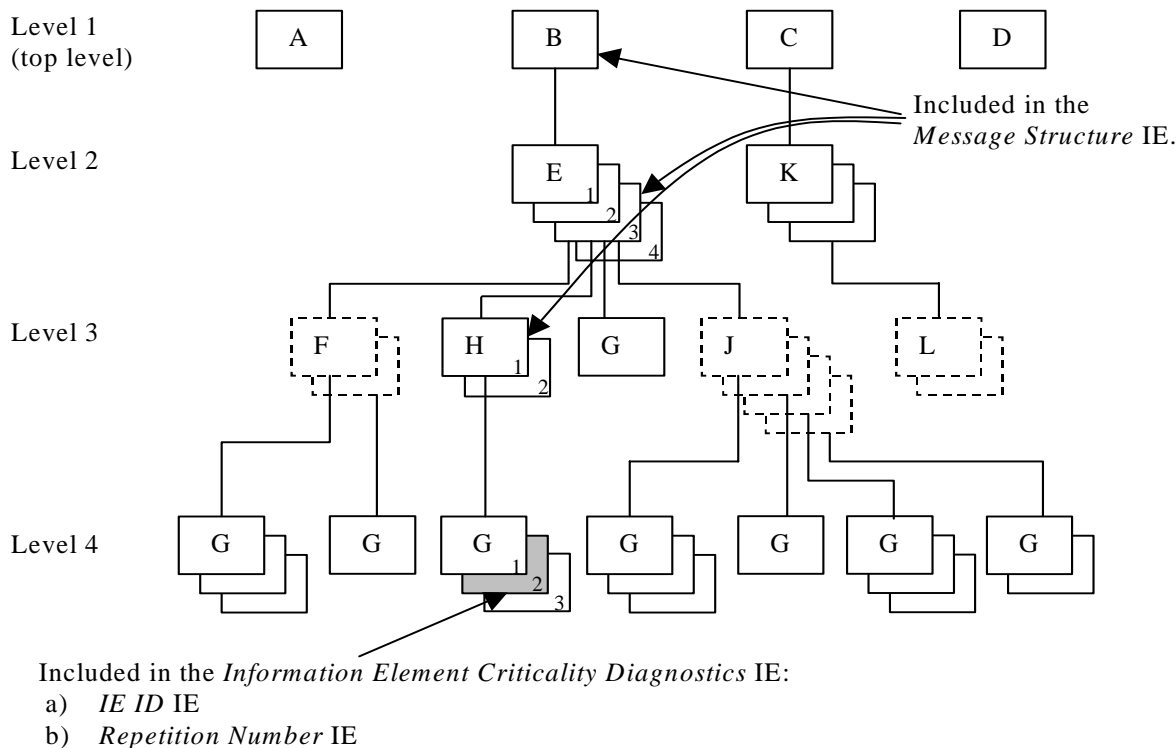


Figure C.4: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE H shown in the figure C.4 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 4.
IE ID	id-G	IE ID from the reported level, i.e. level 4.
Repetition Number	2	Repetition number on the reported level, i.e. level 4.
Type of Error	not understood	
<i>Message Structure, first repetition</i>		
>IE ID	id-B	IE ID from level 1.
<i>Message Structure, second repetition</i>		
>IE ID	id-E	IE ID from level 2.
>Repetition Number	3	Repetition number from level 2.
<i>Message Structure, third repetition</i>		
>IE ID	id-H	IE ID from the lowest level above the reported level, i.e. level 3.
>Repetition Number	1	Repetition number from the lowest level above the reported level, i.e. level 3.

Note 5. The repetition number of level 4 indicates the number of repetitions of IE G received up to the detected erroneous repetition, counted below the same instance of the previous level with assigned criticality (instance 1 of IE H on level 3).

C.3.4 Example 4

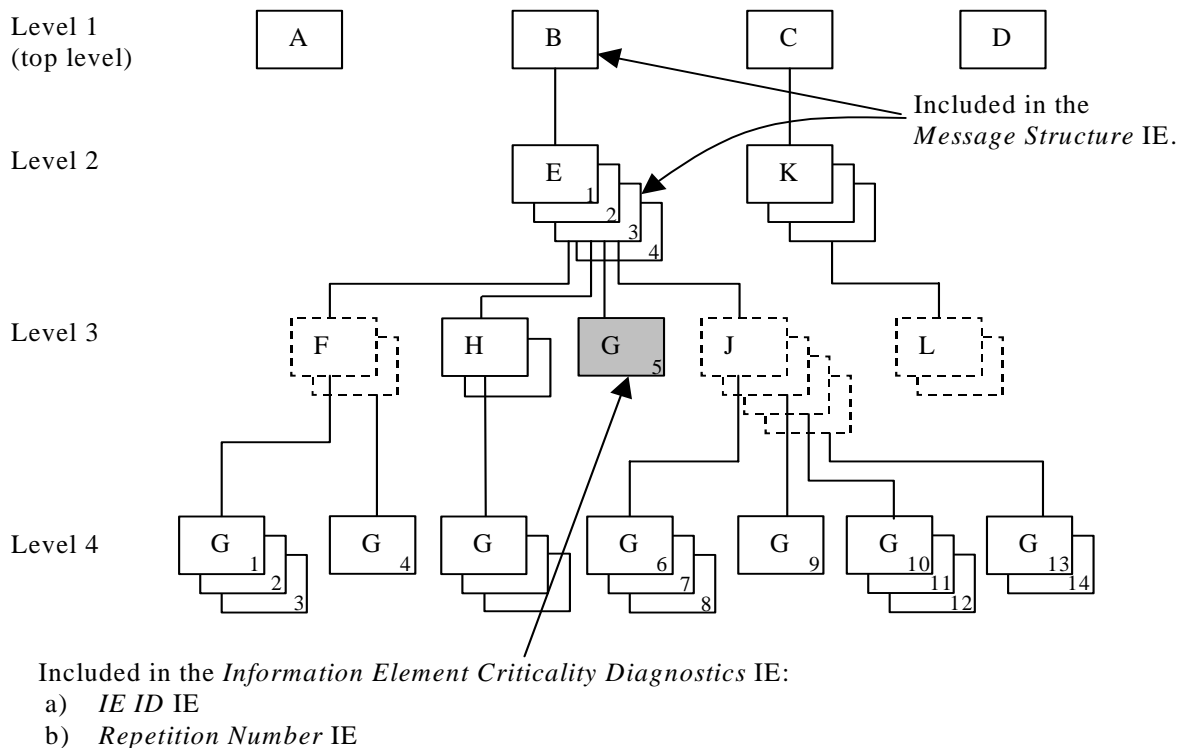


Figure C.5: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE E shown in the figure C.5 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 3.
IE ID	id-G	IE ID from the reported level, i.e. level 3.
Repetition Number	5	Repetition number on the reported level, i.e. level 3. (Since the IE E (level 2) is the lowest level included in the <i>Message Structure</i> IE this is the fifth occurrence of IE G within the IE E (level 2)).
Type of Error	not understood	
<i>Message Structure, first repetition</i>		
>IE ID	id-B	IE ID from level 1.
<i>Message Structure, second repetition</i>		
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.
>Repetition Number	3	Repetition number from the lowest level above the reported level, i.e. level 2.

Note 6. The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

C.3.5 Example 5

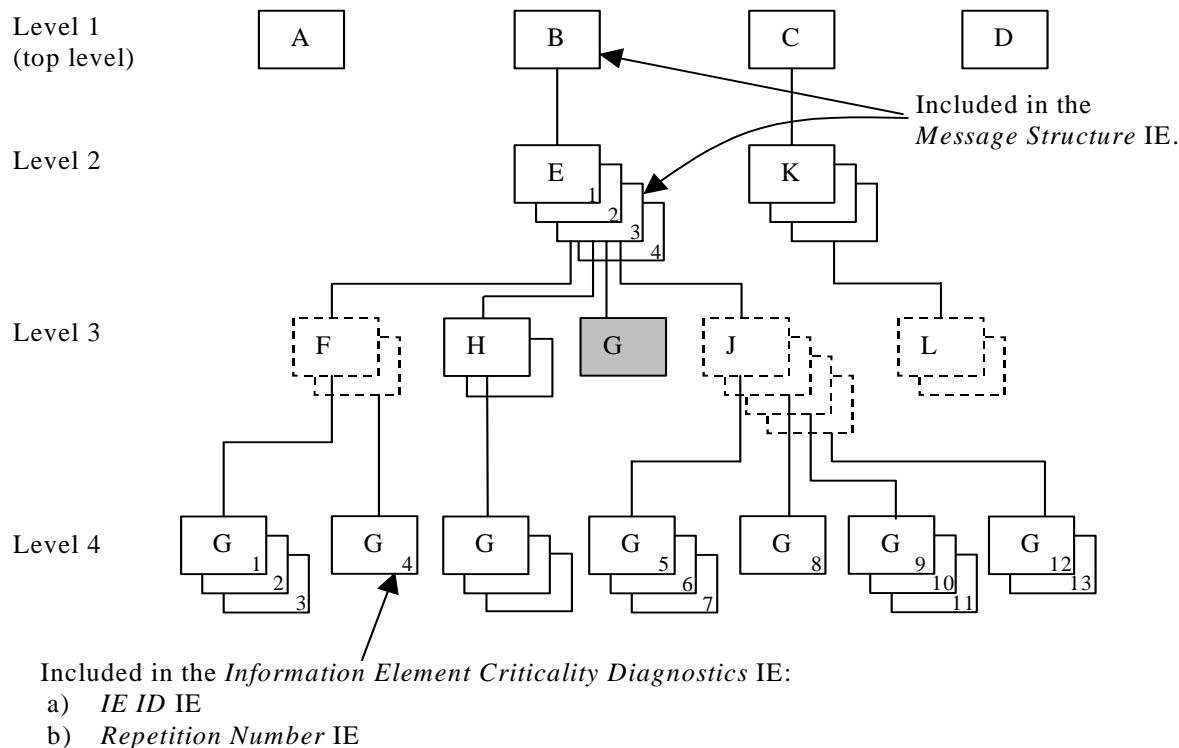


Figure C.6: Example of a received NBAP message with a missing IE

If the instance marked as grey in the IE G in the IE E shown in the figure C.6 above, is missing this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 3.
IE ID	id-G	IE ID from the reported level, i.e. level 3.
Repetition Number	4	Repetition number up to the missing IE on the reported level, i.e. level 3. (Since the IE E (level 2) is the lowest level included in the <i>Message Structure</i> IE there have been four occurrences of IE G within the IE E (level 2) up to the missing occurrence.
Type of Error	missing	
<i>Message Structure, first repetition</i>		
>IE ID	id-B	IE ID from level 1.
<i>Message Structure, second repetition</i>		
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.
>Repetition Number	3	Repetition number from the lowest level above the reported level, i.e. level 2.

Note 7. The repetition number of the reported IE indicates the number of repetitions of IE G received up to but not including the missing occurrence, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

C.4 ASN.1 of EXAMPLE MESSAGE

```

ExampleMessage ::= SEQUENCE {
    ProtocolIEs          ProtocolIE-Container          {{ExampleMessage-IEs}},
    ProtocolExtensions  ProtocolExtensionContainer  {{ExampleMessage-Extensions}}  OPTIONAL,
    ...
}

ExampleMessage-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-A    CRITICALITY reject  TYPE A  PRESENCE mandatory } |
    { ID id-B    CRITICALITY reject  TYPE B  PRESENCE mandatory } |
    { ID id-C    CRITICALITY reject  TYPE C  PRESENCE mandatory } |
    { ID id-D    CRITICALITY reject  TYPE D  PRESENCE mandatory } ,
    ...
}

B ::= SEQUENCE {
    e                E-List,
    iE-Extensions   ProtocolExtensionContainer { {B-ExtIEs} }  OPTIONAL,
    ...
}

B-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

E-List ::= SEQUENCE (SIZE (1..maxE)) OF ProtocolIE-Single-Container { {E-IEs} }

E-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-E    CRITICALITY ignore  TYPE E  PRESENCE mandatory }
}

E ::= SEQUENCE {
    f                F-List,
    h                H-List,
    g                G-List1,
    j                J-List,
    iE-Extensions   ProtocolExtensionContainer { {E-ExtIEs} }  OPTIONAL,
    ...
}

E-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

F-List ::= SEQUENCE (SIZE (1..maxF)) OF F

F ::= SEQUENCE {
    g                G-List2 OPTIONAL,
    iE-Extensions   ProtocolExtensionContainer { {F-ExtIEs} }  OPTIONAL,
    ...
}

F-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

G-List2 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G2-IEs} }

G2-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-G    CRITICALITY ignore  TYPE G  PRESENCE mandatory }
}

H-List ::= SEQUENCE (SIZE (1..maxH)) OF ProtocolIE-Single-Container { {H-IEs} }

H-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-H    CRITICALITY ignore  TYPE H  PRESENCE mandatory }
}

H ::= SEQUENCE {
    g                G-List3 OPTIONAL,
    iE-Extensions   ProtocolExtensionContainer { {H-ExtIEs} }  OPTIONAL,
    ...
}

H-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
G-List3 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G3-IEs} }

G3-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-G    CRITICALITY notify  TYPE G  PRESENCE mandatory }
}

G-List1 ::= ProtocolIE-Single-Container { {G1-IEs} }

G1-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-G    CRITICALITY reject  TYPE G  PRESENCE mandatory }
}

J-List ::= SEQUENCE (SIZE (1..maxJ)) OF J

J ::= SEQUENCE {
  g                G-List4 OPTIONAL,
  iE-Extensions   ProtocolExtensionContainer { {J-ExtIEs} } OPTIONAL,
  ...
}

J-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

G-List4 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G4-IEs} }

G4-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-G    CRITICALITY reject  TYPE G  PRESENCE mandatory }
}

C ::= SEQUENCE {
  k                K-List,
  iE-Extensions   ProtocolExtensionContainer { {C-ExtIEs} } OPTIONAL,
  ...
}

C-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

K-List ::= SEQUENCE (SIZE (1..maxK)) OF ProtocolIE-Single-Container { {K-IEs} }

K-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-K    CRITICALITY notify  TYPE K  PRESENCE mandatory }
}

K ::= SEQUENCE {
  l                L-List,
  iE-Extensions   ProtocolExtensionContainer { {K-ExtIEs} } OPTIONAL,
  ...
}

K-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

L-List ::= SEQUENCE (SIZE (1..maxL)) OF L

L ::= SEQUENCE {
  m                M OPTIONAL,
  iE-Extensions   ProtocolExtensionContainer { {L-ExtIEs} } OPTIONAL,
  ...
}

L-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

ExampleMessage-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```


CHANGE REQUEST

⌘ **25.433 CR 671** ⌘ rev **1** ⌘ Current version: **4.4.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title: ⌘ NBAP Review – Alignment of the ASN.1

Source: ⌘ R-WG3

Work item code: ⌘ TEI

Date: ⌘ May 2002

Category: ⌘ **F**

Release: ⌘ REL-4

Use one of the following categories:

- F** (essential correction)
- A** (corresponds to a correction in an earlier release)
- B** (Addition of feature),
- C** (Functional modification of feature)
- D** (Editorial modification)

Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

- 2 (GSM Phase 2)
- R96 (Release 1996)
- R97 (Release 1997)
- R98 (Release 1998)
- R99 (Release 1999)
- REL-4 (Release 4)
- REL-5 (Release 5)

Reason for change: ⌘ The tabular format is not fully aligned on the ASN.1 description.

Summary of change: ⌘ This CR corrects the ASN.1 description in the following cases:

R1:

9.3.3:

- In RESOURCE STATUS INDICATION message:
 - The range of the sequence defining "FPACH-LCR-InformationList-ResourceStatusInd" is corrected from (0..Max) to (1..Max).
- In RADIO LINK SETUP REQUEST TDD message:
 - The TimeslotISCP-LCR-InfoList-RL-SETUPRqstTDD is replaced by DL-TimeslotISCPInfoLCR and its definition is removed.
- In RADIO LINK ADDITION REQUEST TDD message:
 - The TIMESLOTISCP-LCR-InfoList-RL-SETUPAdditionTDD is replaced by DL-TimeslotISCPInfoLCR and its definition is removed.
- In RADIO LINK RECONFIGURATION PREPARE TDD message:
 - The range of the sequence defining "DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD" is corrected from (0..Max) to (1..Max).
- In DL POWER TIMESLOT CONTROL REQUEST TDD message:
 - The TimeslotISCP-LCR-InfoList-DL-PC-RqstTDD is replaced by DL-TimeslotISCPInfoLCR and its definition is removed.
- In DEDICATED MEASUREMENT INITIATION RESPONSE message:
 - The range of the sequence defining "PUSCH-Info-DM-Rsp" is corrected from (0..Max) to (1..Max).

R0:

9.3.3:

- Imports List:
 - The CellSyncBurstAvailabilityIndicator IE is not used anywhere in the section 9.3.3, so it is removed from the list of imported NBAP IEs.
 - Ids are removed when corrections rendered them obsolete.
- In COMMON TRANSPORT CHANNEL SETUP REQUEST TDD message:
 - The ASN.1 definition is changed to avoid the redundant use of a ProtocolIE- Single-Container for the following IE that is already defined in an Extension Container (Criticality is defined twice for the same IE):
 - PICH-LCR-Parameters-CTCH-SetupRqstTDD,
 - Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD,
 - PRACH-LCR-ParametersList-CTCH-SetupRqstTDD,
 - FPACH-LCR-Parameters-CTCH-SetupRqstTDD.
- In AUDIT RESPONSE message:
 - The ASN.1 definition is changed to avoid the redundant use of a ProtocolIE- Single-Container for the following IEs that are already defined in an Extension Container (Criticality is defined twice for the same IE):
 - DwPCH-LCR-InformationList-AuditRsp.
- In COMMON MEASUREMENT INITIATION REQUEST message:
 - The extension in the "CommonMeasurementInitiationRequest-Extensions" is put before the "..." as it was agreed to do.
- In COMMON MEASUREMENT INITIATION RESPONSE message,
 - The extension in the "CommonMeasurementInitiationResponse-Extensions" is put before the "..." as it was agreed to do.
- In CELL RECONFIGURATION REQUEST TDD message,
 - The type of the "pCCPCH-Power" IE in the "PCCPCH-Information-Cell-ReconfRqstTDD" IE is corrected from "DL-Power" to "PCCPCH-Power". => Isolated impact correction (but non backward compatible).
- In RESOURCE STATUS INDICATION message:
 - The "FPACH-LCR-InformationList-ResourceStatusInd" and the "DwPCH-LCR-Information-ResourceStatusInd" extensions are removed from "Local-Cell-InformationItem-ResourceStatusInd-ExtIEs" and put in "Cell-InformationItem-ResourceStatusInd-ExtIEs" (this is in line with the tabular format in 9.1.32, and with the intention of the specification).
- In RADIO LINK SETUP REQUEST TDD message:
 - The ASN.1 definition is changed to avoid the redundant use of a ProtocolIE- Single-Container for the following IEs that are already defined in an Extension Container (Criticality is defined twice for the same IE):
 - UL-DPCH-LCR-Information-RL-SetupRqstTDD,
 - DL-DPCH-LCR-Information-RL-SetupRqstTDD.
- In RADIO LINK ADDITION REQUEST TDD message:
 - The extension in the "UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs" is put before the "..." as it was agreed to do.
 - The presence of "TIMESLOTISCP-InformationList-LCR-RL-AdditionRqstTDD" extension is corrected to "reject". For the time being the presence of DL Time Slot ISCP Info LCR IE is "reject" in the tabular format (see 9.1.39.2) and "notify" in the ASN.1. For consistency reasons (see also Radio Link Setup procedure), the presence is corrected in the ASN.1.
- In RADIO LINK RECONFIGURATION PREPARE TDD message:
 - The extension in the "DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs" is put before the "..." as it was agreed to do.
 - In "UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs", the first extension is corrected to contain "LCR" (it currently reuses the HCR TDD IEs and not IEs specifically designed for LCR TDD...). The comment is also updated. Furthermore, the ASN.1 definition of "UL-DPCH-LCR-

- InformationAddList-RL-ReconfPrepTDD" is changed to avoid the redundant use of a ProtocolIE-Single-Container for IEs that are already defined in an Extension Container (Criticality is defined twice for the same IE).
- Furthermore, the ASN.1 definition is also changed to avoid the redundant use of a ProtocolIE-Single-Container for the following IEs that are already defined in an Extension Container (Criticality is defined twice for the same IE):
 - UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
 - DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
 - DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD.
 - In RADIO LINK RECONFIGURATION REQUEST TDD message, the criticality of the "id-RL-Information-RL-ReconfRqstTDD" IE has been corrected to "reject". This is in line with the tabular format and the intention of the specification (i.e. consistent with the criticality for this IE in the RADIO LINK RECONFIGURATION PREPARE TDD message).
 - In PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message:
 - A comment is added to indicate that the Extension identified by "id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst" is for LCR TDD only.
 - The "DL-Code-InformationAddList-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfULTSs" in the ASN.1 and "maxnoofPDSCHs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.
 - The "DL-Code-InformationAddList-LCR-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfULTSs" in the ASN.1 and "maxnoofPDSCHs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.
 - The "UL-Code-InformationAddList-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfPDSCHs" in the ASN.1 and "maxnoofPUSCHs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.
 - The "UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfDLTSLCRs" in the ASN.1 and "maxnoofULTSLCRs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.
 - The "UL-Code-InformationAddList-LCR-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfULTSs" in the ASN.1 and "maxnoofPUSCHs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.
 - The "UL-Code-LCR-InformationModifyList-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfPDSCHs" in the ASN.1 and "maxnoofPUSCHs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.
 - Furthermore the ASN.1 definition is changed to avoid the redundant use of a ProtocolIE-Single-Container for the following IEs that are already defined in an Extension Container (Criticality is defined twice for the same IE):
 - PDSCH-AddInformation-LCR-PSCH-ReconfRqst,
 - PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
 - PUSCH-AddInformation-LCR-PSCH-ReconfRqst,
 - PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst.

9.3.4:

- CellSyncBurstAvailabilityIndicator:
 - This IE is not used anywhere in the ASN.1, so its definition is removed (and it can be removed from the list of "Imports" in 9.3.3).
- Seed in IPDL-FDD-Parameters:
 - This is defined as an INTEGER(0..63) in the tabular format and an INTEGER(1..63) in the ASN.1. To be in line with TS 25.423 (where it is defined as an INTEGER(0..63) both in the tabular format and the ASN.1), this is corrected to INTEGER(0..63) in the ASN.1.

- TDD-ChannelisationCodeLCR:
 - The sequence has a "..." at the end, but there is no Extension Container. An Extension Container is added.

9.3.6:

- Ids are removed when corrections rendered them obsolete.

Impact Analysis:

Impact assessment towards the previous version of the specification (same release): this CR has impact on the previous version of the specification (same release) under the protocol point of view as the ASN.1 is modified for several procedures.

Consequences if not approved: ☹ If this CR is not approved, then the discrepancy between the tabular format and the ASN.1 will remain.

Clauses affected: ☹ 9.3.3, 9.3.4, 9.3.6

Other specs affected:	☹ <input checked="" type="checkbox"/>	Other core specifications	☹ TS 25.433 v 3.9.0 CR 702
	<input type="checkbox"/>	Test specifications	TS 25.433 v 5.0.0 CR 672
	<input type="checkbox"/>	O&M Specifications	

Other comments: ☹

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ☹ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.3.3 PDU Definitions

```

-- *****
--
-- PDU definitions for NBAP.
--
-- *****

NBAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

UNCHANGED TEXT IS REMOVED

IMPORTS
  Active-Pattern-Sequence-Information,
  AddorDeleteIndicator,
  AICH-Power,
  AICH-TransmissionTiming,
  AllocationRetentionPriority,
  APPreambleSignature,
  APSubChannelNumber,
  AvailabilityStatus,
  BCCH-ModificationTime,
  BindingID,
  BlockingPriorityIndicator,
  SCTD-Indicator,
  Cause,
  CCTrCH-ID,
  CDSubChannelNumbers,
  CellParameterID,
  CellSyncBurstAvailabilityIndicator,
  CellSyncBurstCode,
  CellSyncBurstCodeShift,
  CellSyncBurstRepetitionPeriod,
  CellSyncBurstSIR,
  CellSyncBurstTiming,
  CellSyncBurstTimingThreshold,
  CFN,
  Channel-Assignment-Indication,
  ChipOffset,
  C-ID,
  Closedlooptimingadjustmentmode,
  CommonChannelsCapacityConsumptionLaw,
  Compressed-Mode-Deactivation-Flag,
  CommonMeasurementAccuracy,
  CommonMeasurementType,

```

CommonMeasurementValue,
CommonMeasurementValueInformation,
CommonPhysicalChannelID,
Common-PhysicalChannel-Status-Information,
Common-TransportChannel-Status-Information,
CommonTransportChannelID,
CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue,
CriticalityDiagnostics,
CPCH-Allowed-Total-Rate,
CPCHScramblingCodeNumber,
CPCH-UL-DPCCH-SlotFormat,
CRNC-CommunicationContextID,
CSBMeasurementID,
CSBTransmissionID,
DCH-FDD-Information,
DCH-InformationResponse,
DCH-ID,
FDD-DCHs-to-Modify,
TDD-DCHs-to-Modify,
DCH-TDD-Information,
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-or-Global-CapacityCredit,
DL-Power,
DLPowerAveragingWindowSize,
DL-ScramblingCode,
DL-TimeslotISCP,
DL-Timeslot-Information,
DL-TimeslotLCR-Information,
DL-TimeslotISCPInfo,
DL-TimeslotISCPInfoLCR,
DL-TPC-Pattern01Count,
DPC-Mode,
DPCH-ID,
DSCH-ID,
DSCH-FDD-Common-Information,
DSCH-FDD-Information,
DSCH-InformationResponse,
DSCH-TDD-Information,
DwPCH-Power,
End-Of-Audit-Sequence-Indicator,
EnhancedDSCHPC,
EnhancedDSCHPCCounter,
EnhancedDSCHPCIndicator,
EnhancedDSCHPCWnd,

EnhancedDSCHPowerOffset,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FPACH-Power,
FrameAdjustmentValue,
FrameHandlingPriority,
FrameOffset,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,
IB-Type,
IndicationType,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
InnerLoopDLPCStatus,
IPDL-FDD-Parameters,
IPDL-TDD-Parameters,
IPDL-Indicator,
LimitedPowerIncrease,
Local-Cell-ID,
MaximumDL-PowerCapability,
MaximumTransmissionPower,
Max-Number-of-PCPCHes,
MaxNrOfUL-DPDCHs,
MaxPRACH-MidambleShifts,
MeasurementFilterCoefficient,
MeasurementID,
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftLCR,
MinimumDL-PowerCapability,
MinSpreadingFactor,
MinUL-ChannelisationCodeLength,
MultiplexingPosition,
NEOT,
NCyclesPerSFNperiod,
NFmax,
NRepetitionsPerCyclePeriod,
N-INSYNC-IND,
N-OUTSYNC-IND,
NeighbouringCellMeasurementInformation,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation,
NodeB-CommunicationContextID,
NStartMessage,
PagingIndicatorLength,
PayloadCRC-PresenceIndicator,

PCCPCH-Power,
PCP-Length,
PDSCH-CodeMapping,
PDSCHSet-ID,
PDSCH-ID,
PICH-Mode,
PICH-Power,
PowerAdjustmentType,
PowerOffset,
PowerRaiseLimit,
PRACH-Midamble,
PreambleSignatures,
PreambleThreshold,
PredictedSFNSFNDeviationLimit,
PredictedTUTRANGPSDeviationLimit,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
SCH-TimeSlot,
PunctureLimit,
PUSCHSet-ID,
PUSCH-ID,
QE-Selector,
RACH-SlotFormat,
RACH-SubChannelNumbers,
ReferenceClockAvailability,
ReferenceSFNOffset,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
RequestedDataValue,
RequestedDataValueInformation,
ResourceOperationalState,
RL-Set-ID,
RL-ID,
Received-total-wide-band-power-Value,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
RNC-ID,
ScramblingCodeNumber,
SecondaryCCPCH-SlotFormat,
Segment-Type,
S-FieldLength,
SFN,
SFNSFNChangeLimit,
SFNSFNDriftRate,
SFNSFNDriftRateQuality,
SFNSFNQuality,
ShutdownTimer,
SIB-Originator,
SpecialBurstScheduling,
SSDT-Cell-Identity,

SSDT-CellID-Length,
SSDT-Indication,
Start-Of-Audit-Sequence-Indicator,
STTD-Indicator,
SSDT-SupportIndicator,
SyncCase,
SYNCD1CodeId,
SyncFrameNumber,
SynchronisationReportCharacteristics,
SynchronisationReportType,
T-Cell,
T-RLFAILURE,
TDD-ChannelisationCode,
TDD-ChannelisationCodeLCR,
TDD-DL-Code-LCR-Information,
TDD-DPCHOffset,
TDD-TPC-DownlinkStepSize,
TDD-PhysicalChannelOffset,
TDD-UL-Code-LCR-Information,
TFCI2-BearerInformationResponse,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TFCS,
TimeSlot,
TimeSlotLCR,
TimeSlotDirection,
TimeSlotStatus,
TimingAdjustmentValue,
TimingAdvanceApplied,
ToAWE,
ToAWS,
TransmissionDiversityApplied,
TransmitDiversityIndicator,
TransmissionGapPatternSequenceCodeInformation,
Transmission-Gap-Pattern-Sequence-Information,
TransportBearerRequestIndicator,
TransportFormatSet,
TransportLayerAddress,
TSTD-Indicator,
TUTRANGPS,
TUTRANGPSChangeLimit,
TUTRANGPSDriftRate,
TUTRANGPSDriftRateQuality,
TUTRANGPSQuality,
UARFCN,
UC-Id,
USCH-Information,
USCH-InformationResponse,
UL-CapacityCredit,
UL-DPCCH-SlotFormat,
UL-SIR,


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UL-FP-Mode,
UL-PhysCH-SF-Variation,
UL-ScramblingCode,
UL-Timeslot-Information,
UL-TimeslotLCR-Information,
UL-TimeSlot-ISCP-Info,
UL-TimeSlot-ISCP-LCR-Info,
UL-TimeslotISCP-Value,
UL-TimeslotISCP-Value-IncrDecrThres,
USCH-ID
FROM NBAP-IEs

```

```

PrivateIE-Container{},
ProtocolExtensionContainer{},
ProtocolIE-Container{},
ProtocolIE-Single-Container{},
ProtocolIE-ContainerList{},
NBAP-PRIVATE-IES,
NBAP-PROTOCOL-IES,
NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers

```

```

id-Active-Pattern-Sequence-Information,
id-AdjustmentRatio,
id-AICH-Information,
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-AP-AICH-Information,
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-BCH-Information,
id-BCCH-ModificationTime,
id-BlockingPriorityIndicator,
id-Cause,
id-CauseLevel-PSCH-ReconfFailureTDD,
id-CauseLevel-RL-AdditionFailureFDD,
id-CauseLevel-RL-AdditionFailureTDD,
id-CauseLevel-RL-ReconfFailure,
id-CauseLevel-RL-SetupFailureFDD,
id-CauseLevel-RL-SetupFailureTDD,
id-CauseLevel-SyncAdjustmntFailureTDD,
id-CCP-InformationItem-AuditRsp,
id-CCP-InformationList-AuditRsp,
id-CCP-InformationItem-ResourceStatusInd,
id-CCTrCH-InformationItem-RL-FailureInd,
id-CCTrCH-InformationItem-RL-RestoreInd,
id-CDCA-ICH-Information,
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD,
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD,
id-Cell-InformationItem-AuditRsp,
id-Cell-InformationItem-ResourceStatusInd,
id-Cell-InformationList-AuditRsp,
id-CellParameterID,

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id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD,
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD,
id-cellSyncBurstRepetitionPeriod,
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD,
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD,
id-CellSyncInfo-CellSyncReprtTDD,
id-CFN,
id-CFNReportingIndicator,
id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD,
id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID,
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-CPCH-Information,
id-CPCH-Parameters-CTCH-SetupRsp,
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-CSBTransmissionID,
id-CSBMeasurementID,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,

id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-TPC-Pattern01Count,
id-DPC-Mode,
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteList-RL-ReconfPrepFDD,
id-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-FDD-Common-Information,
id-DSCH-TDD-Information,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-End-Of-Audit-Sequence-Indicator,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator,
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRqstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstTDD,
id-IndicationType-ResourceStatusInd,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rqst,
id-InformationExchangeObjectType-InfEx-Rsp,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationReportCharacteristics,
id-InformationType,
id-InitDL-Power,
id-InnerLoopDLPCStatus,

id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
id-IPDLParameter-Information-Cell-ReconfRqstFDD,
id-IPDLParameter-Information-Cell-SetupRqstFDD,
id-IPDLParameter-Information-Cell-ReconfRqstTDD,
id-IPDLParameter-Information-Cell-SetupRqstTDD,
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
id-Limited-power-increase-information-Cell-SetupRqstFDD,
id-Local-Cell-ID,
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp,
id-Local-Cell-InformationItem-ResourceStatusInd,
id-Local-Cell-InformationItem2-ResourceStatusInd,
id-Local-Cell-InformationList-AuditRsp,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MaximumTransmissionPower,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,
id-NCyclesPerSFNperiod,
id-NeighbouringCellMeasurementInformation,
id-NodeB-CommunicationContextID,
id-NRRepetitionsPerCyclePeriod,
id-P-CCPCH-Information,
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRqstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRqstTDD,
id-PCH-Parameters-CTCH-SetupRsp,
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstTDD,
id-PCH-Information,
id-PCPCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRqstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PDSCHSets-AddList-PSCH-ReconfRqst,
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRqstTDD,
id-PICH-ParametersItem-CTCH-SetupRqstTDD,
id-PowerAdjustmentType,
id-PRACH-Information,
id-PRACHConstant,
id-PRACH-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD,

id-PrimaryCCPCH-Information-Cell-SetupRqstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRqstFDD,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,
id-PrimarySCH-Information-Cell-SetupRqstFDD,
id-PrimaryScramblingCode,
id-SCH-Information-Cell-ReconfRqstTDD,
id-SCH-Information-Cell-SetupRqstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PUSCHConstant,
id-PUSCHSets-AddList-PSCH-ReconfRqst,
id-PUSCHSets-DeleteList-PSCH-ReconfRqst,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,
id-RACH-ParametersItem-CTCH-SetupRqstFDD,
id-RACH-ParameterItem-CTCH-SetupRqstTDD,
id-ReferenceClockAvailability,
id-ReferenceSFNoffset,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRqstFDD,
id-RL-informationItem-RL-DeletionRqst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
id-RL-InformationItem-RL-RestoreInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-informationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRqstFDD,
id-RL-InformationList-RL-SetupRqstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-ReconfRqstTDD,

id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-S-CCPCH-Information,
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-SecondarySCH-Information-Cell-ReconfRqstFDD,
id-SecondarySCH-Information-Cell-SetupRqstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-SSDT-CellIDforEDSCHPC,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH,
id-SyncFrameNumber,
id-SynchronisationReportType,
id-SynchronisationReportCharacteristics,
id-SyncReportType-CellSyncReprtTDD,
id-T-Cell,
id-TFCI2-Bearer-Information-RL-SetupRqstFDD,
id-TFCI2-BearerInformationResponse,
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-timeslotInfo-CellSyncInitiationRqstTDD,
id-TimeslotISCPInfo,
id-TimingAdvanceApplied,
id-TransmissionDiversityApplied,
id-UARFCNforNt,
id-UARFCNforNd,
id-UARFCNforNu,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,

id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
 id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
 id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
 id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
 id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
 id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
 id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
 id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
 id-UL-DPCH-InformationItem-RL-AdditionRqstTDD,
 id-UL-DPCH-InformationList-RL-SetupRqstTDD,
 id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
 id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
 id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
 id-UL-DPCH-Information-RL-ReconfPrepFDD,
 id-UL-DPCH-Information-RL-ReconfRqstFDD,
 id-UL-DPCH-Information-RL-SetupRqstFDD,
 id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD,
 id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,
 id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD,
 id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,
 id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
 id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,
 id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,
 id-USCH-Information-Add,
 id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
 id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
 id-USCH-InformationResponse,
 id-USCH-Information,
 id-DL-DPCH-LCR-Information-RL-SetupRqstTDD,
~~id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD,~~
 id-DwPCH-LCR-Information,
~~id-DwPCH-LCR-Information-AuditRsp,~~
 id-DwPCH-LCR-InformationList-AuditRsp,
 id-DwPCH-LCR-Information-Cell-SetupRqstTDD,
 id-DwPCH-LCR-Information-Cell-ReconfRqstTDD,
 id-DwPCH-LCR-Information-ResourceStatusInd,
 id-maxFACH-Power-LCR-CTCH-SetupRqstTDD,
 id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD,
 id-FPACH-LCR-Information,
 id-FPACH-LCR-Information-AuditRsp,
 id-FPACH-LCR-InformationList-AuditRsp,
 id-FPACH-LCR-InformationList-ResourceStatusInd,
 id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD,
~~id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD,~~
 id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD,
 id-PCCPCH-LCR-Information-Cell-SetupRqstTDD,
 id-PCH-Power-LCR-CTCH-SetupRqstTDD,
 id-PCH-Power-LCR-CTCH-ReconfRqstTDD,
 id-PICH-LCR-Parameters-CTCH-SetupRqstTDD,
~~id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD,~~
 id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD,
~~id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD,~~
 id-RL-InformationResponse-LCR-RL-SetupRspTDD,

~~id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD,~~
 id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD,
 id-TimeSlot,
 id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,
 id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD,
 id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD,
 id-TimeSlotLCR-CM-Rqst,
 id-UL-DPCH-LCR-Information-RL-SetupRqstTDD,
~~id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD,~~
 id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
 id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
 id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD,
 id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
~~id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,~~
 id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
~~id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,~~
 id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD,
 id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD,
 id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
 id-UL-DPCH-LCR-InformationModify-AddList,
~~id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,~~
 id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD,
 id-UL-SIRTarget,
 id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst,
 id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
 id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
 id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
 id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst,
 id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
 id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
 id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
 id-PUSCH-Info-DM-Rqst,
 id-PUSCH-Info-DM-Rsp,
 id-PUSCH-Info-DM-Rprt,
 id-RL-InformationResponse-LCR-RL-AdditionRspTDD,

 maxNrOfCCTrCHs,
 maxNrOfCellSyncBursts,
 maxNrOfCodes,
 maxNrOfCPCHs,
 maxNrOfDCHs,
 maxNrOfDLTSs,
 maxNrOfDLTSLCRs,
 maxNrOfDPCHs,
 maxNrOfDSCHs,
 maxNrOfFACHs,
 maxNrOfRLs,
 maxNrOfRLs-1,
 maxNrOfRLs-2,
 maxNrOfRLSets,
 maxNrOfPCPCHs,
 maxNrOfPDSCHs,
 maxNrOfPUSCHs,


```
maxNrOfPRACHLCRs ,
maxNrOfPDSCHSets ,
maxNrOfPUSCHSets ,
maxNrOfReceptsPerSyncFrame ,
maxNrOfSCCPCHs ,
maxNrOfSCCPCHLCRs ,
maxNrOfULTSs ,
maxNrOfULTSLCRs ,
maxNrOfUSCHs ,
maxAPSigNum ,
maxCPCHCell ,
maxFACHCell ,
maxFPACHCell ,
maxNoofLen ,
maxRACHCell ,
maxPCPCHCell ,
maxPRACHCell ,
maxSCCPCHCell ,
maxSCPICHCell ,
maxCellinNodeB ,
maxCCPinNodeB ,
maxCommunicationContext ,
maxLocalCellinNodeB ,
maxNrOfSlotFormatsPRACH ,
maxNrOfCellSyncBursts ,
maxNrOfReceptsPerSyncFrame ,
maxIB ,
maxIBSEG
FROM NBAP-Constants ;
```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP REQUEST TDD
--
-- *****

CommonTransportChannelSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelSetupRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelSetupRequestTDD-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY reject      TYPE          C-ID
      PRESENCE mandatory }|
    { ID      id-ConfigurationGenerationID  CRITICALITY reject      TYPE          ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID      id-CommonPhysicalChannelType-CTCH-SetupRqstTDD  CRITICALITY ignore      TYPE          CommonPhysicalChannelType-CTCH-
SetupRqstTDD          PRESENCE mandatory },
    ...
}

CommonTransportChannelSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonPhysicalChannelType-CTCH-SetupRqstTDD ::= CHOICE {
    secondary-CCPCH-parameters      Secondary-CCPCH-CTCH-SetupRqstTDD,
    pRACH-parameters                PRACH-CTCH-SetupRqstTDD,
    ...
}

Secondary-CCPCH-CTCH-SetupRqstTDD ::= SEQUENCE {
    sCCPCH-CCTrCH-ID                CCTrCH-ID,
    tFCS                             TFCS,
    tFCI-Coding                      TFCI-Coding,
    punctureLimit                    PunctureLimit,
    secondaryCCPCH-parameterList     Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD,
    fACH-ParametersList              FACH-ParametersList-CTCH-SetupRqstTDD    OPTIONAL,
    pCH-Parameters                   PCH-Parameters-CTCH-SetupRqstTDD        OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer {{Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs}}    OPTIONAL,
    ...
}

Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID      id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD  CRITICALITY reject      EXTENSION  Secondary-CCPCH-LCR-
parameterList-CTCH-SetupRqstTDD  PRESENCE optional }, -- Mandatory for 1.28Mcps TDD only
    ...
}

Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD }}

Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {

```

```

    { ID id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD PRESENCE
    mandatory } -- Mandatory for 3.84Mcps TDD only
}

```

```

Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD

```

```

Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    tdd-ChannelisationCode           TDD-ChannelisationCode,
    timeslot                         TimeSlot,
    midambleShiftAndBurstType        MidambleShiftAndBurstType,
    tdd-PhysicalChannelOffset        TDD-PhysicalChannelOffset,
    repetitionPeriod                 RepetitionPeriod,
    repetitionLength                 RepetitionLength,
    s-CCPCH-Power                   DL-Power,
    iE-Extensions                    ProtocolExtensionContainer { { Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

FACH-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstTDD }}

```

```

FACH-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE FACH-ParametersListIE-CTCH-SetupRqstTDD PRESENCE mandatory }
}

```

```

FACH-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstTDD

```

```

FACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    fACH-CCTrCH-ID                  CCTrCH-ID,
    dl-TransportFormatSet           TransportFormatSet,
    toAWS                           ToAWS,
    toAWE                            ToAWE,
    iE-Extensions                    ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-maxFACH-Power-LCR-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION DL-Power PRESENCE optional },
    -- For 1.28Mcps TDD only
    ...
}

```

```

PCH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRqstTDD }}

```

```

PCH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersItem-CTCH-SetupRqstTDD CRITICALITY reject TYPE PCH-ParametersItem-CTCH-SetupRqstTDD PRESENCE mandatory }
}

```

```

PCH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    pCH-CCTrCH-ID                 CCTrCH-ID,
    dl-TransportFormatSet         TransportFormatSet,
    toAWS                          ToAWS,
    toAWE                          ToAWE,
    pICH-Parameters               PICH-Parameters-CTCH-SetupRqstTDD,
    iE-Extensions                 ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PCH-Power-LCR-CTCH-SetupRqstTDD      CRITICALITY reject      EXTENSION    DL-Power          PRESENCE    optional } |
    -- For 1.28Mcps TDD only
    { ID id-PICH-LCR-Parameters-CTCH-SetupRqstTDD      CRITICALITY reject      EXTENSION    PICH-LCR-Parameters-CTCH-
SetupRqstTDD      PRESENCE    optional }, -- Mandatory for 1.28Mcps TDD only
    ...
}

PICH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-SetupRqstTDD }}

PICH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PICH-ParametersItem-CTCH-SetupRqstTDD      CRITICALITY reject      TYPE PICH-ParametersItem-CTCH-SetupRqstTDD      PRESENCE optional }
}
-- Mandatory for 3.84Mcps TDD only

PICH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    tdd-ChannelisationCode       TDD-ChannelisationCode,
    timeSlot                     TimeSlot,
    midambleShiftAndBurstType    MidambleShiftAndBurstType,
    tdd-PhysicalChannelOffset    TDD-PhysicalChannelOffset,
    repetitionPeriod             RepetitionPeriod,
    repetitionLength             RepetitionLength,
    pagingIndicatorLength        PagingIndicatorLength,
    pICH-Power                   PICH-Power,
    iE-Extensions               ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PICH-LCR-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-LCR-ParametersIE-CTCH-SetupRqstTDD }}

PICH-LCR-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD      CRITICALITY reject      TYPE PICH-LCR-ParametersItem-CTCH-SetupRqstTDD      PRESENCE mandatory }
}
-- Mandatory for 1.28Mcps TDD

PICH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR,
    timeSlotLCR                 TimeSlotLCR,

```

```

midambleShiftLCR                               MidambleShiftLCR,
tdd-PhysicalChannelOffset                       TDD-PhysicalChannelOffset,
repetitionPeriod                               RepetitionPeriod,
repetitionLength                               RepetitionLength,
pagingIndicatorLength                           PagingIndicatorLength,
pICH-Power                                     PICH-Power,
iE-Extensions                                  ProtocolExtensionContainer { { PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
...
}

PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container { { Secondary-CCPCH-LCR-parameterListIEs-CTCH-SetupRqstTDD } }

Secondary-CCPCH-LCR-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
{ ID id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD
PRESENCE optional } Mandatory for 1.28Mcps TDD only
}

Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHLCRs)) OF Secondary-CCPCH-LCR-parameterItem-CTCH-
SetupRqstTDD

Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
commonPhysicalChannelID                       CommonPhysicalChannelID,
tdd-ChannelisationCodeLCR                     TDD-ChannelisationCodeLCR,
timeslotLCR                                   TimeslotLCR,
midambleShiftLCR                             MidambleShiftLCR,
tdd-PhysicalChannelOffset                     TDD-PhysicalChannelOffset,
repetitionPeriod                             RepetitionPeriod,
repetitionLength                             RepetitionLength,
s-CCPCH-Power                                 DL-Power,
iE-Extensions                                ProtocolExtensionContainer { { Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs } }
OPTIONAL,
...
}

Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PRACH-CTCH-SetupRqstTDD ::= SEQUENCE {
prach-Parameters-CTCH-SetupRqstTDD           PRACH-Parameters-CTCH-SetupRqstTDD,
iE-Extensions                                ProtocolExtensionContainer { { PRACH-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
...
}

PRACH-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION PRACH-LCR-ParametersList-CTCH-
SetupRqstTDD PRESENCE optional } | -- Mandatory for 1.28Mcps TDD only
{ ID id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION FPACH-LCR-Parameters-CTCH-
SetupRqstTDD PRESENCE optional }, -- Mandatory for 1.28Mcps TDD only

```

```

}
...
}

PRACH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersIE-CTCH-SetupRqstTDD }}

PRACH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-ParametersItem-CTCH-SetupRqstTDD  CRITICALITY reject TYPE PRACH-ParametersItem-CTCH-SetupRqstTDD PRESENCE optional }
}
-- Mandatory for 3.84Mcps TDD only

PRACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,
  tFCS                          TFCS,
  timeslot                      Timeslot,
  tdd-ChannelisationCode       TDD-ChannelisationCode,
  maxPRACH-MidambleShifts      MaxPRACH-MidambleShifts,
  pRACH-Midamble               PRACH-Midamble,
  rACH                          RACH-Parameter-CTCH-SetupRqstTDD,
  iE-Extensions                 ProtocolExtensionContainer  { { PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }  OPTIONAL,
  ...
}

PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RACH-Parameter-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ RACH-ParameterIE-CTCH-SetupRqstTDD }}

RACH-ParameterIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-ParameterItem-CTCH-SetupRqstTDD  CRITICALITY reject TYPE RACH-ParameterItem-CTCH-SetupRqstTDD PRESENCE mandatory }
}

RACH-ParameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonTransportChannelID      CommonTransportChannelID,
  uL-TransportFormatSet         TransportFormatSet,
  iE-Extensions                 ProtocolExtensionContainer  { { RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs} }  OPTIONAL,
  ...
}

RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PRACH-LCR-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-LCR-ParametersListIEs-CTCH-SetupRqstTDD }}

PRACH-LCR-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD  CRITICALITY reject TYPE PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD PRESENCE
optional }
}

PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfPRACHLCRs)) OF PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD

PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {

```

```

commonPhysicalChannelID      CommonPhysicalChannelID,
tFCS                          TFCS,
timeslotLCR                   TimeSlotLCR,
tdd-ChannelisationCodeLCR     TDD-ChannelisationCodeLCR,
maxPRACH-MidambleShifts      MaxPRACH-MidambleShifts,
pRACH-Midamble                 PRACH-Midamble,
rACH                           RACH-Parameter-CTCH-SetupRqstTDD,
iE-Extensions                  ProtocolExtensionContainer { { PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} } OPTIONAL,
...
}

```

```

PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

~~FPACH-LCR-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FPACH-LCR-ParametersIE-CTCH-SetupRqstTDD }}~~

~~FPACH-LCR-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {~~
~~{ ID id FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD CRITICALITY reject-TYPE FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD PRESENCE optional }~~
~~}~~

```

FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
commonPhysicalChannelID      CommonPhysicalChannelID,
tdd-ChannelisationCodeLCR     TDD-ChannelisationCodeLCR,
timeslotLCR                   TimeSlotLCR,
midambleShiftLCR              MidambleShiftLCR,
fPACH-Power                    FPACH-Power,
iE-Extensions                  ProtocolExtensionContainer { { FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} } OPTIONAL,
...
}

```

```

FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- AUDIT RESPONSE
--
-- *****
```

```
AuditResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{AuditResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{AuditResponse-Extensions}}    OPTIONAL,
    ...
}
```

```
AuditResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-End-Of-Audit-Sequence-Indicator    CRITICALITY    ignore    TYPE    End-Of-Audit-Sequence-Indicator    PRESENCE    mandatory } |
    { ID    id-Cell-InformationList-AuditRsp     CRITICALITY    ignore    TYPE    Cell-InformationList-AuditRsp    PRESENCE
    optional } |
    { ID    id-CCP-InformationList-AuditRsp      CRITICALITY    ignore    TYPE    CCP-InformationList-AuditRsp    PRESENCE    optional
    } |
    -- CCP (Communication Control Port) --
    { ID    id-Local-Cell-InformationList-AuditRsp    CRITICALITY    ignore    TYPE    Local-Cell-InformationList-AuditRsp    PRESENCE
    optional } |
    { ID    id-Local-Cell-Group-InformationList-AuditRsp    CRITICALITY    ignore    TYPE    Local-Cell-Group-InformationList-AuditRsp    PRESENCE
    optional } |
    { ID    id-CriticalityDiagnostics            CRITICALITY    ignore    TYPE    CriticalityDiagnostics            PRESENCE    optional
    },
    ...
}
```

```
AuditResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-AuditRsp}}
```

```
Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID    id-Cell-InformationItem-AuditRsp     CRITICALITY    ignore    TYPE    Cell-InformationItem-AuditRsp    PRESENCE    optional }
}
```

```
Cell-InformationItem-AuditRsp ::= SEQUENCE {
    c-ID,
    configurationGenerationID,
    resourceOperationalState,
    availabilityStatus,
    local-Cell-ID,
    primary-SCH-Information          P-SCH-Information-AuditRsp          OPTIONAL,
    secondary-SCH-Information        S-SCH-Information-AuditRsp        OPTIONAL,
    primary-CPICH-Information        P-CPICH-Information-AuditRsp      OPTIONAL,
    secondary-CPICH-InformationList  S-CPICH-InformationList-AuditRsp  OPTIONAL,
    primary-CCPCH-Information        P-CCPCH-Information-AuditRsp     OPTIONAL,
    bCH-Information                  BCH-Information-AuditRsp          OPTIONAL,
    secondary-CCPCH-InformationList  S-CCPCH-InformationList-AuditRsp  OPTIONAL,
    pCH-Information                  PCH-Information-AuditRsp         OPTIONAL,
    pICH-Information                  PICH-Information-AuditRsp        OPTIONAL,
```



```

fACH-InformationList          FACH-InformationList-AuditRsp          OPTIONAL,
pRACH-InformationList         PRACH-InformationList-AuditRsp         OPTIONAL,
rACH-InformationList         RACH-InformationList-AuditRsp         OPTIONAL,
aICH-InformationList         AICH-InformationList-AuditRsp         OPTIONAL,
pCPCH-InformationList        PCPCH-InformationList-AuditRsp        OPTIONAL,
cPCH-InformationList         CPCH-InformationList-AuditRsp         OPTIONAL,
aP-AICH-InformationList      AP-AICH-InformationList-AuditRsp      OPTIONAL,
cDCA-ICH-InformationList     CDCA-ICH-InformationList-AuditRsp     OPTIONAL,
sCH-Information              SCH-Information-AuditRsp              OPTIONAL,
iE-Extensions                ProtocolExtensionContainer { { Cell-InformationItem-AuditRsp-ExtIEs } } OPTIONAL,
...
}

Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-FPACH-LCR-InformationList-AuditRsp          CRITICALITY ignore EXTENSION FPACH-LCR-InformationList-AuditRsp          PRESENCE optional } |
  -- For 1.28Mcps TDD only
  { ID id-DwPCH-LCR-InformationList-AuditRsp          CRITICALITY ignore EXTENSION DwPCH-LCR-InformationList-AuditRspCommon-PhysicalChannel-Status-
  Information PRESENCE optional },
  -- For 1.28Mcps TDD only
  ...
}

P-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-AuditRsp }}

P-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-SCH-Information          CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-AuditRsp }}

S-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-SCH-Information          CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CPICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-AuditRsp }}

P-CPICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CPICH-Information          CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-CPICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-AuditRsp }}

S-CPICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-CPICH-Information          CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CCPCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-AuditRsp }}

P-CCPCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CCPCH-Information          CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

BCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ BCH-InformationIE-AuditRsp }}

```

```

BCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-BCH-Information    CRITICALITY ignore    TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

S-CCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-AuditRsp }}

S-CCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-S-CCPCH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

PCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PCH-InformationIE-AuditRsp }}

PCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-Information    CRITICALITY ignore    TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

PICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PICH-InformationIE-AuditRsp }}

PICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-PICH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

FACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-AuditRsp }}

FACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-Information    CRITICALITY ignore    TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

PRACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-AuditRsp }}

PRACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-PRACH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

RACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-AuditRsp }}

RACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-RACH-Information    CRITICALITY ignore    TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-AuditRsp }}

AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-AICH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

PCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-AuditRsp }}

PCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-PCPCH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE optional }
}

CPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-AuditRsp }}

```

```

CPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-CPCH-Information    CRITICALITY ignore    TYPE Common-TransportChannel-Status-Information          PRESENCE optional }
}

AP-AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-AuditRsp }}

AP-AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-AP-AICH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

CDCA-ICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-AuditRsp }}

CDCA-ICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-CDCA-ICH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ SCH-InformationIE-AuditRsp }}

SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-SCH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

CCP-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-AuditRsp }}

CCP-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-CCP-InformationItem-AuditRsp    CRITICALITY    ignore    TYPE    CCP-InformationItem-AuditRsp    PRESENCE mandatory }
}

CCP-InformationItem-AuditRsp ::= SEQUENCE {
    communicationControlPortID    CommunicationControlPortID,
    resourceOperationalState    ResourceOperationalState,
    availabilityStatus    AvailabilityStatus,
    iE-Extensions    ProtocolExtensionContainer {{ CCP-InformationItem-AuditRsp-ExtIEs }}    OPTIONAL,
    ...
}

CCP-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FPACH-LCR-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-AuditRsp }}

FPACH-LCR-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-FPACH-LCR-Information-AuditRsp    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

DwPCH-LCR-InformationList-AuditRsp ::= ProtocolIE-Single-Container {{ DwPCH-LCR-InformationIE-AuditRsp }}

DwPCH-LCR-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-DwPCH-LCR-Information-AuditRsp    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

```

```
Local-Cell-InformationList-AuditRsp ::=SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-AuditRsp }}
```

```
Local-Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID      id-Local-Cell-InformationItem-AuditRsp      CRITICALITY      ignore      TYPE      Local-Cell-InformationItem-
  AuditRsp      PRESENCE      mandatory}
}
```

```
Local-Cell-InformationItem-AuditRsp ::= SEQUENCE {
  local-Cell-ID                Local-Cell-ID,
  dl-or-global-capacityCredit  DL-or-Global-CapacityCredit,
  ul-capacityCredit            UL-CapacityCredit      OPTIONAL,
  commonChannelsCapacityConsumptionLaw  CommonChannelsCapacityConsumptionLaw,
  dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw,
  maximumDL-PowerCapability    MaximumDL-PowerCapability  OPTIONAL,
  minSpreadingFactor           MinSpreadingFactor      OPTIONAL,
  minimumDL-PowerCapability    MinimumDL-PowerCapability  OPTIONAL,
  local-Cell-Group-ID         Local-Cell-ID          OPTIONAL,
  iE-Extensions               ProtocolExtensionContainer  {{ Local-Cell-InformationItem-AuditRsp-ExtIEs}}  OPTIONAL,
  ...
}
```

```
Local-Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID      id-ReferenceClockAvailability      CRITICALITY      ignore      EXTENSION ReferenceClockAvailability      PRESENCE optional },
  ...
}
```

```
Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-InformationItemIE-AuditRsp }}
```

```
Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID      id-Local-Cell-Group-InformationItem-AuditRsp      CRITICALITY      ignore      TYPE      Local-Cell-Group-
  InformationItem-AuditRsp      PRESENCE      mandatory}
}
```

```
Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
  local-Cell-Group-ID                Local-Cell-ID,
  dl-or-global-capacityCredit  DL-or-Global-CapacityCredit,
  ul-capacityCredit            UL-CapacityCredit      OPTIONAL,
  commonChannelsCapacityConsumptionLaw  CommonChannelsCapacityConsumptionLaw,
  dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw,
  iE-Extensions               ProtocolExtensionContainer  {{ Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}  OPTIONAL,
  ...
}
```

```
Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- COMMON MEASUREMENT INITIATION REQUEST
--
-- *****

CommonMeasurementInitiationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonMeasurementInitiationRequest-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CommonMeasurementInitiationRequest-Extensions}}    OPTIONAL,
    ...
}

CommonMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID                CRITICALITY reject          TYPE MeasurementID          PRESENCE
      mandatory }|
    { ID id-CommonMeasurementObjectType-CM-Rqst    CRITICALITY reject          TYPE CommonMeasurementObjectType-CM-Rqst    PRESENCE
      mandatory }|
    -- This IE represents both the Common Measurement Object Type IE and the choice based on the Common Measurement Object Type
    -- as described in the tabular message format in subclause 9.1.
    { ID id-CommonMeasurementType          CRITICALITY reject          TYPE CommonMeasurementType          PRESENCE mandatory
      }|
    { ID id-MeasurementFilterCoefficient      CRITICALITY reject          TYPE MeasurementFilterCoefficient      PRESENCE
      optional }|
    { ID id-ReportCharacteristics            CRITICALITY reject          TYPE ReportCharacteristics            PRESENCE mandatory
      }|
    { ID id-SFNReportingIndicator            CRITICALITY reject          TYPE SFNReportingIndicator            PRESENCE mandatory
      }|
    { ID id-SFN                             CRITICALITY reject          TYPE SFN                             PRESENCE optional
      },
    ...
}

CommonMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
 {ID id-CommonMeasurementAccuracy          CRITICALITY reject          EXTENSION CommonMeasurementAccuracy          PRESENCE optional},
 ...
 {ID id-CommonMeasurementAccuracy          CRITICALITY reject          EXTENSION CommonMeasurementAccuracy          PRESENCE optional}
}

CommonMeasurementObjectType-CM-Rqst ::= CHOICE {
    cell                Cell-CM-Rqst,
    rACH                RACH-CM-Rqst,
    cPCH                CPCH-CM-Rqst,
    ...
}

Cell-CM-Rqst ::= SEQUENCE {
    c-ID                C-ID,
    timeSlot            TimeSlot    OPTIONAL,    -- For 3.84Mcps TDD only
    iE-Extensions      ProtocolExtensionContainer    {{ CellItem-CM-Rqst-ExtIEs }}    OPTIONAL,
    ...
}

CellItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

    { ID id-TimeSlotLCR-CM-Rqst      CRITICALITY reject      EXTENSION TimeSlotLCR      PRESENCE optional } | -- For 1.28Mcps TDD only
    { ID id-NeighbouringCellMeasurementInformation  CRITICALITY ignore      EXTENSION NeighbouringCellMeasurementInformation  PRESENCE
optional},
    ...
}

RACH-CM-Rqst ::= SEQUENCE {
    c-ID                C-ID,
    commonTransportChannelID  CommonTransportChannelID,
    iE-Extensions       ProtocolExtensionContainer { { RACHItem-CM-Rqst-ExtIEs } }      OPTIONAL,
    ...
}

RACHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCH-CM-Rqst ::= SEQUENCE {
    c-ID                C-ID,
    commonTransportChannelID  CommonTransportChannelID,
    spreadingfactor      MinUL-ChannelisationCodeLength      OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { { CPCHItem-CM-Rqst-ExtIEs } }      OPTIONAL,
    ...
}

CPCHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- COMMON MEASUREMENT INITIATION RESPONSE
--
-- *****

CommonMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonMeasurementInitiationResponse-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CommonMeasurementInitiationResponse-Extensions}}    OPTIONAL,
    ...
}

CommonMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID          CRITICALITY ignore          TYPE MeasurementID          PRESENCE
      mandatory }|
    { ID id-CommonMeasurementObjectType-CM-Rsp  CRITICALITY ignore          TYPE CommonMeasurementObjectType-CM-Rsp  PRESENCE optional
      }|
    { ID id-SFN          CRITICALITY ignore          TYPE SFN          PRESENCE
      optional }|
    { ID id-CriticalityDiagnostics  CRITICALITY ignore          TYPE CriticalityDiagnostics          PRESENCE optional },
    ...
}

CommonMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
 { ID id-CommonMeasurementAccuracy          CRITICALITY ignore          EXTENSION CommonMeasurementAccuracy          PRESENCE optional},
 ...
 { ID id-CommonMeasurementAccuracy          CRITICALITY ignore          EXTENSION CommonMeasurementAccuracy          PRESENCE optional}
}

CommonMeasurementObjectType-CM-Rsp ::= CHOICE {
    cell          Cell-CM-Rsp,
    rACH          RACH-CM-Rsp,
    cPCH          CPCH-CM-Rsp,
    ...
}

Cell-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue,
    iE-Extensions                  ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs } }    OPTIONAL,
    ...
}

CellItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RACH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue,
    iE-Extensions                  ProtocolExtensionContainer { { RACHItem-CM-Rsp-ExtIEs } }    OPTIONAL,
    ...
}

RACHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```
    ...
}

CPCH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue      CommonMeasurementValue,
    iE-Extensions                ProtocolExtensionContainer { { CPCHItem-CM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

CPCHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

UNCHANGED TEXT IS REMOVED


```
-- *****
--
-- CELL RECONFIGURATION REQUEST TDD
--
-- *****
```

```
CellReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellReconfigurationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellReconfigurationRequestTDD-Extensions}}
    ...
}
```

```
CellReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY reject TYPE C-ID
      PRESENCE mandatory }|
    { ID id-ConfigurationGenerationID CRITICALITY reject TYPE ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID id-Synchronisation-Configuration-Cell-ReconfRqst CRITICALITY reject TYPE Synchronisation-Configuration-
      Cell-ReconfRqst PRESENCE optional }|
    { ID id-TimingAdvanceApplied CRITICALITY reject TYPE TimingAdvanceApplied
      PRESENCE optional }| -- For 3.84Mcps TDD only
    { ID id-SCH-Information-Cell-ReconfRqstTDD CRITICALITY reject TYPE SCH-Information-Cell-
      ReconfRqstTDD PRESENCE optional }| -- For 3.84Mcps TDD only
    { ID id-PCCPCH-Information-Cell-ReconfRqstTDD CRITICALITY reject TYPE PCCPCH-Information-Cell-
      ReconfRqstTDD PRESENCE optional }|
    { ID id-MaximumTransmissionPower CRITICALITY reject TYPE MaximumTransmissionPower
      PRESENCE optional }|
    { ID id-DPCHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE optional }|
    { ID id-PUSCHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE optional }|
    { ID id-PRACHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE optional }|
    { ID id-TimeSlotConfigurationList-Cell-ReconfRqstTDD CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-
      ReconfRqstTDD PRESENCE optional }, -- For 3.84Mcps TDD only
    ...
}
```

```
CellReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-
      Cell-ReconfRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only
    { ID id-DwPCH-LCR-Information-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION DwPCH-LCR-Information-Cell-
      ReconfRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only
    { ID id-IPDLParameter-Information-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION IPDLParameter-Information-
      Cell-ReconfRqstTDD PRESENCE optional },
    ...
}
```

```
SCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    sCH-Power DL-Power,
    iE-Extensions ProtocolExtensionContainer { { PSCH-Information-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}
```

```

}

PSCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCCPCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    pCCPCH-Power                     DLPCCPCH-Power,
    iE-Extensions                     ProtocolExtensionContainer { { PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-ReconfRqstTDD

TimeSlotConfigurationItem-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlot                          TimeSlot,
    timeSlotStatus                     TimeSlotStatus,
    timeSlotDirection                 TimeSlotDirection,
    iE-Extensions                     ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD

TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR                       TimeSlotLCR,
    timeSlotStatus                     TimeSlotStatus,
    timeSlotDirection                 TimeSlotDirection,
    iE-Extensions                     ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DwPCH-LCR-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    dwPCH-Power                      DwPCH-Power,
    iE-Extensions                     ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```
    ...
  }

IPDLParameter-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
  iPDL-TDD-Parameters          IPDL-TDD-Parameters      OPTIONAL,
  iPDL-Indicator               IPDL-Indicator,
  iE-Extensions                ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RESOURCE STATUS INDICATION
--
-- *****

ResourceStatusIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{ResourceStatusIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{ResourceStatusIndication-Extensions}}          OPTIONAL,
    ...
}

ResourceStatusIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-IndicationType-ResourceStatusInd          CRITICALITY ignore          TYPE IndicationType-ResourceStatusInd          PRESENCE
      mandatory } |
    -- This IE represents both the Indication Type IE and the choice based on the indication type as described in the tabular message format in
    subclause 9.1.
    { ID id-Cause          CRITICALITY ignore          TYPE Cause          PRESENCE
      optional },
    ...
}

ResourceStatusIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IndicationType-ResourceStatusInd ::= CHOICE {
    no-Failure          No-Failure-ResourceStatusInd,
    serviceImpacting   ServiceImpacting-ResourceStatusInd,
    ...
}

No-Failure-ResourceStatusInd ::= SEQUENCE {
    local-Cell-InformationList          Local-Cell-InformationList-ResourceStatusInd,
    local-Cell-Group-InformationList    Local-Cell-Group-InformationList-ResourceStatusInd OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { No-FailureItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
    ...
}

No-FailureItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Local-Cell-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-ResourceStatusInd }}

Local-Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-InformationItem-ResourceStatusInd          CRITICALITY ignore          TYPE Local-Cell-InformationItem-ResourceStatusInd          PRESENCE
      mandatory }
}

Local-Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
    local-CellID          Local-Cell-ID,

```

```

addorDeleteIndicator          AddorDeleteIndicator,
dl-or-global-capacityCredit   DL-or-Global-CapacityCredit   OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
ul-capacityCredit             UL-CapacityCredit           OPTIONAL,
commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
maximumDL-PowerCapability     MaximumDL-PowerCapability     OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
minSpreadingFactor           MinSpreadingFactor           OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
minimumDL-PowerCapability     MinimumDL-PowerCapability     OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
local-Cell-Group-ID          Local-Cell-ID              OPTIONAL,
iE-Extensions                 ProtocolExtensionContainer { { Local-Cell-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
...
}

Local-Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-FPACH-InformationList-ResourceStatusInd CRITICALITY ignore EXTENSION FPACH-InformationList-ResourceStatusInd PRESENCE optional }| for 1.28Meps TDD only
{ ID id-DwPCH-Information-ResourceStatusInd CRITICALITY ignore EXTENSION DwPCH-Information-ResourceStatusInd PRESENCE optional }| for 1.28Meps TDD only
{ ID id-ReferenceClockAvailability CRITICALITY ignore EXTENSION ReferenceClockAvailability PRESENCE optional },
-- This IE shall be present if AddorDeleteIndicator IE is set to "add" and the Local Cell is related to a TDD cell
...
}

Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-InformationItemIE-ResourceStatusInd }}

Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
{ ID id-Local-Cell-Group-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-Group-InformationItem-ResourceStatusInd PRESENCE mandatory }
}

Local-Cell-Group-InformationItem-ResourceStatusInd ::= SEQUENCE {
local-Cell-Group-ID          Local-Cell-ID,
dl-or-global-capacityCredit   DL-or-Global-CapacityCredit,
ul-capacityCredit             UL-CapacityCredit           OPTIONAL,
commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw,
dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw,
iE-Extensions                 ProtocolExtensionContainer { { Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
...
}

Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

ServiceImpacting-ResourceStatusInd ::= SEQUENCE {
local-Cell-InformationList    Local-Cell-InformationList2-ResourceStatusInd OPTIONAL,

```

```

local-Cell-Group-InformationList      Local-Cell-Group-InformationList2-ResourceStatusInd OPTIONAL,
cCP-InformationList                  CCP-InformationList-ResourceStatusInd      OPTIONAL,
cell-InformationList                 Cell-InformationList-ResourceStatusInd     OPTIONAL,
iE-Extensions                        ProtocolExtensionContainer { { ServiceImpactingItem-ResourceStatusInd-ExtIEs} }  OPTIONAL,
...
}

ServiceImpactingItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

Local-Cell-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-
InformationItemIE2-ResourceStatusInd }}

Local-Cell-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
{ ID id-Local-Cell-InformationItem2-ResourceStatusInd    CRITICALITY ignore    TYPE Local-Cell-InformationItem2-ResourceStatusInd    PRESENCE
mandatory }
}

Local-Cell-InformationItem2-ResourceStatusInd ::= SEQUENCE {
local-Cell-ID                      Local-Cell-ID,
dl-or-global-capacityCredit        DL-or-Global-CapacityCredit    OPTIONAL,
ul-capacityCredit                  UL-CapacityCredit              OPTIONAL,
commonChannelsCapacityConsumptionLaw    CommonChannelsCapacityConsumptionLaw    OPTIONAL,
dedicatedChannelsCapacityConsumptionLaw    DedicatedChannelsCapacityConsumptionLaw    OPTIONAL,
maximum-DL-PowerCapability          MaximumDL-PowerCapability        OPTIONAL,
minSpreadingFactor                 MinSpreadingFactor              OPTIONAL,
minimumDL-PowerCapability           MinimumDL-PowerCapability        OPTIONAL,
iE-Extensions                      ProtocolExtensionContainer { { Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs} }  OPTIONAL,
...
}

Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-ReferenceClockAvailability    CRITICALITY ignore    EXTENSION ReferenceClockAvailability    PRESENCE optional },
...
}

Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-
InformationItemIE2-ResourceStatusInd }}

Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
{ ID id-Local-Cell-Group-InformationItem2-ResourceStatusInd    CRITICALITY ignore    TYPE Local-Cell-Group-InformationItem2-ResourceStatusInd    PRESENCE mandatory }
}

Local-Cell-Group-InformationItem2-ResourceStatusInd ::= SEQUENCE {
local-Cell-Group-ID                Local-Cell-ID,
dl-or-global-capacityCredit        DL-or-Global-CapacityCredit    OPTIONAL,
ul-capacityCredit                  UL-CapacityCredit              OPTIONAL,
commonChannelsCapacityConsumptionLaw    CommonChannelsCapacityConsumptionLaw    OPTIONAL,
dedicatedChannelsCapacityConsumptionLaw    DedicatedChannelsCapacityConsumptionLaw    OPTIONAL,
iE-Extensions                      ProtocolExtensionContainer { { Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs} }  OPTIONAL,
...
}

```

```

}

Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCP-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-ResourceStatusInd }}

CCP-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-CCP-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE CCP-InformationItem-ResourceStatusInd PRESENCE mandatory }
}

CCP-InformationItem-ResourceStatusInd ::= SEQUENCE {
    communicationControlPortID          CommunicationControlPortID,
    resourceOperationalState            ResourceOperationalState,
    availabilityStatus                  AvailabilityStatus,
    iE-Extensions                       ProtocolExtensionContainer { { CCP-InformationItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
    ...
}

CCP-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Cell-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-ResourceStatusInd }}

Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Cell-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Cell-InformationItem-ResourceStatusInd PRESENCE mandatory }
}

Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
    c-ID                                C-ID,
    resourceOperationalState            ResourceOperationalState          OPTIONAL,
    availabilityStatus                  AvailabilityStatus                OPTIONAL,
    primary-SCH-Information              P-SCH-Information-ResourceStatusInd  OPTIONAL, --FDD only
    secondary-SCH-Information            S-SCH-Information-ResourceStatusInd  OPTIONAL, --FDD only
    primary-CPICH-Information            P-CPICH-Information-ResourceStatusInd  OPTIONAL, --FDD only
    secondary-CPICH-Information          S-CPICH-InformationList-ResourceStatusInd  OPTIONAL, --FDD only
    primary-CCPCH-Information            P-CCPCH-Information-ResourceStatusInd  OPTIONAL,
    bCH-Information                     BCH-Information-ResourceStatusInd     OPTIONAL,
    secondary-CCPCH-InformationList      S-CCPCH-InformationList-ResourceStatusInd  OPTIONAL,
    pCH-Information                      PCH-Information-ResourceStatusInd     OPTIONAL,
    pICH-Information                     PICH-Information-ResourceStatusInd     OPTIONAL,
    fACH-InformationList                 FACH-InformationList-ResourceStatusInd  OPTIONAL,
    PRACH-InformationList                PRACH-InformationList-ResourceStatusInd  OPTIONAL,
    rACH-InformationList                 RACH-InformationList-ResourceStatusInd  OPTIONAL,
    aICH-InformationList                 AICH-InformationList-ResourceStatusInd  OPTIONAL, --FDD only
    pCPCH-InformationList                PCPCH-InformationList-ResourceStatusInd  OPTIONAL, --FDD only
    cPCH-InformationList                 CPCH-InformationList-ResourceStatusInd  OPTIONAL, --FDD only
    aP-AICH-InformationList              AP-AICH-InformationList-ResourceStatusInd  OPTIONAL, --FDD only
    CDCA-ICH-InformationList             CDCA-ICH-InformationList-ResourceStatusInd  OPTIONAL, --FDD only
}

```

```

sCH-Information          SCH-Information-ResourceStatusInd          OPTIONAL, --3.84Mcps TDD only
iE-Extensions          ProtocolExtensionContainer { { Cell-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
...
}

Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-FPACH-LCR-InformationList-ResourceStatusInd          CRITICALITY ignore          EXTENSION          FPACH-LCR-InformationList-ResourceStatusInd
  PRESENCE optional } | -- for 1.28Mcps TDD only
  { ID id-DwPCH-LCR-Information-ResourceStatusInd          CRITICALITY ignore          EXTENSION          DwPCH-LCR-Information-ResourceStatusInd
  PRESENCE optional }, -- for 1.28Mcps TDD only
  ...
}

P-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-ResourceStatusInd }}

P-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-SCH-Information          CRITICALITY ignore          TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-ResourceStatusInd }}

S-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-SCH-Information          CRITICALITY ignore          TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CPICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-ResourceStatusInd }}

P-CPICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-CPICH-Information          CRITICALITY ignore          TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-CPICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-ResourceStatusInd }}

S-CPICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-CPICH-Information          CRITICALITY ignore          TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CCPCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-ResourceStatusInd }}

P-CCPCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-CCPCH-Information          CRITICALITY ignore          TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

BCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ BCH-InformationIE-ResourceStatusInd }}

BCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-BCH-Information          CRITICALITY ignore          TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

S-CCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-ResourceStatusInd }}

```



```

S-CCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

PCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PCH-InformationIE-ResourceStatusInd }}

PCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

PICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PICH-InformationIE-ResourceStatusInd }}

PICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

FACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-ResourceStatusInd }}

FACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

PRACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-ResourceStatusInd }}

PRACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

RACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-ResourceStatusInd }}

RACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-ResourceStatusInd }}

AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

PCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-ResourceStatusInd }}

PCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE optional }
}

CPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-ResourceStatusInd }}

```

```

CPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-CPCH-Information    CRITICALITY ignore    TYPE Common-TransportChannel-Status-Information          PRESENCE optional }
}

AP-AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-ResourceStatusInd }}

AP-AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-AP-AICH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE optional }
}

CDCA-ICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-ResourceStatusInd }}

CDCA-ICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-CDCA-ICH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE optional }
}

SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ SCH-InformationIE-ResourceStatusInd }}

SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-SCH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

FPACH-LCR-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (91..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-ResourceStatusInd }}

FPACH-LCR-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-FPACH-LCR-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

DwPCH-LCR-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ DwPCH-LCR-InformationIE-ResourceStatusInd }}

DwPCH-LCR-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-DwPCH-LCR-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK SETUP REQUEST TDD
--
-- *****

RadioLinkSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY reject          TYPE          CRNC-CommunicationContextID
      PRESENCE mandatory }|
    { ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify          TYPE          UL-CCTrCH-InformationList-RL-
SetupRqstTDD          PRESENCE optional }|
    { ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify          TYPE          DL-CCTrCH-InformationList-RL-
SetupRqstTDD          PRESENCE optional }|
    { ID id-DCH-TDD-Information          CRITICALITY reject          TYPE          DCH-TDD-Information          PRESENCE optional }|
    { ID id-DSCH-TDD-Information          CRITICALITY reject          TYPE          DSCH-TDD-Information          PRESENCE optional }|
    { ID id-USCH-Information          CRITICALITY reject          TYPE          USCH-Information          PRESENCE optional }|
    { ID id-RL-Information-RL-SetupRqstTDD CRITICALITY reject          TYPE          RL-Information-RL-SetupRqstTDD
      PRESENCE mandatory },
    ...
}

RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
    ProtocolIE-Single-Container{{ UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify          TYPE          UL-CCTrCH-InformationItem-RL-
SetupRqstTDD          PRESENCE mandatory}
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS              TFCS,
    tFCI-Coding       TFCI-Coding,
    punctureLimit     PunctureLimit,
    uL-DPCH-Information UL-DPCH-Information-RL-SetupRqstTDD    OPTIONAL,    -- For 3.84Mcps TDD only
    iE-Extensions     ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify          EXTENSION    UL-DPCH-LCR-Information-RL-SetupRqstTDD    PRESENCE optional
    }| -- For 1.28Mcps TDD only
    { ID id-UL-SIRTarget          CRITICALITY reject          EXTENSION    UL-SIR          PRESENCE optional          },
}

```

```

-- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
...
}

UL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container({ UL-DPCH-InformationIE-RL-SetupRqstTDD })

UL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationList-RL-SetupRqstTDD      CRITICALITY notify  TYPE UL-DPCH-InformationItem-RL-SetupRqstTDD      PRESENCE mandatory  }
}

UL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  uL-Timeslot-Information  UL-Timeslot-Information,
  iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container({ UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD })

UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD      CRITICALITY notify  TYPE UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD      PRESENCE
optional  }
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  uL-TimeslotLCR-Information  UL-TimeslotLCR-Information,
  iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container({ DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD })

DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD      CRITICALITY      notify      TYPE DL-CCTrCH-InformationItem-RL-SetupRqstTDD      PRESENCE      mandatory }
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCtRch-ID      CCTrCH-ID,

```

```

tFCS                                TFCS,
tFCI-Coding                          TFCI-Coding,
punctureLimit                        PunctureLimit,
tdd-TPC-DownlinkStepSize             TDD-TPC-DownlinkStepSize,
cCtRCH-TPCList                       CCTrCH-TPCList-RL-SetupRqstTDD     OPTIONAL,
dL-DPCH-Information                  DL-DPCH-Information-RL-SetupRqstTDD  OPTIONAL, -- For 3.84Mcps TDD only
iE-Extensions                         ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
...
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify     EXTENSION   DL-DPCH-LCR-Information-RL-SetupRqstTDD  PRESENCE optional
  }, -- For 1.28Mcps TDD only
  ...
}

CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD

CCTrCH-TPCItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCtRCH-ID                          CCTrCH-ID,
  iE-Extensions                       ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationList-RL-SetupRqstTDD     CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-SetupRqstTDD     PRESENCE mandatory }
}

DL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod                    RepetitionPeriod,
  repetitionLength                    RepetitionLength,
  tdd-DPCHOffset                      TDD-DPCHOffset,
  dL-Timeslot-Information              DL-Timeslot-Information,
  iE-Extensions                       ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD     CRITICALITY notify TYPE DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD     PRESENCE
mandatory }
}

```

```

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  dL-TimeslotLCR-Information DL-TimeslotLCR-Information,
  tstdIndicator              TSTD-Indicator,
  iE-Extensions              ProtocolExtensionContainer { { DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

```

```

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
  rL-ID          RL-ID,
  c-ID           C-ID,
  frameOffset    FrameOffset,
  specialBurstScheduling SpecialBurstScheduling,
  initialDL-transmissionPower DL-Power,
  maximumDL-power DL-Power,
  minimumDL-power DL-Power,
  dL-TimeSlotISCPInfo DL-TimeSlotISCPInfo OPTIONAL, -- For 3.84Mcps TDD only
  iE-Extensions  ProtocolExtensionContainer { { RL-Information-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

```

```

RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD CRITICALITY reject EXTENSION DL-TimeSlotISCPInfoLCRTimeslotISCP-LCR-InfoList-RL-SetupRqstTDD PRESENCE optional }, -- For 1.28Mcps TDD only
  ...
}

```

```

TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD ::= SEQUENCE {
  dL-TimeSlotISCP-LCR-Info DL-TimeSlotISCPInfoLCR,
  iE-Extensions            ProtocolExtensionContainer { {TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK ADDITION REQUEST TDD
--
-- *****

RadioLinkAdditionRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkAdditionRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkAdditionRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-NodeB-CommunicationContextID          CRITICALITY    reject                TYPE NodeB-
    CommunicationContextID          PRESENCE    mandatory    }}
    { ID      id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD    CRITICALITY    reject                TYPE UL-CCTrCH-InformationList-
    RL-AdditionRqstTDD          PRESENCE    optional    }|
    { ID      id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD    CRITICALITY    reject                TYPE DL-CCTrCH-InformationList-
    RL-AdditionRqstTDD          PRESENCE    optional    }|
    { ID      id-RL-Information-RL-AdditionRqstTDD    CRITICALITY    reject                TYPE RL-Information-RL-
    AdditionRqstTDD          PRESENCE    mandatory    },
    ...
}

RadioLinkAdditionRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-AdditionRqstTDD

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    uL-DPCH-Information      UL-DPCH-InformationList-RL-AdditionRqstTDD    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID      id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD    CRITICALITY    notify                EXTENSION    UL-DPCH-
    InformationItem-LCR-RL-AdditionRqstTDD          PRESENCE    optional    }, -- For 1.28cps TDD only
    ...
    { ID      id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD    CRITICALITY    notify                EXTENSION    UL-DPCH-
    InformationItem-LCR-RL-AdditionRqstTDD          PRESENCE    optional    }, -- For 1.28cps TDD only
}

UL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}

UL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-UL-DPCH-InformationItem-RL-AdditionRqstTDD    CRITICALITY    notify                TYPE UL-DPCH-InformationItem-RL-
    AdditionRqstTDD          PRESENCE    optional    } -- For 3.84Mcps TDD only
}

UL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {

```

```

    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    uL-Timeslot-Information UL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-AdditionRqstTDD

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID              CCTrCH-ID,
    dL-DPCH-Information    DL-DPCH-InformationList-RL-AdditionRqstTDD OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD CRITICALITY notify EXTENSION DL-DPCH-
InformationItem-LCR-RL-AdditionRqstTDD PRESENCE optional }, -- For 1.28Mcps TDD only
    ...
}

DL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}

DL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationItem-RL-AdditionRqstTDD CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-
AdditionRqstTDD PRESENCE mandatory} -- For 3.84Mcps TDD only
}

DL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dL-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-AdditionRqstTDD ::= SEQUENCE {
    rL-ID                 RL-ID,
    c-ID                  C-ID,
    frameOffset           FrameOffset,
    diversityControlField DiversityControlField,
    initial-DL-Transmission-Power DL-Power OPTIONAL,
}

```



```

maximumDL-Power          DL-Power          OPTIONAL,
minimumDL-Power          DL-Power          OPTIONAL,
dL-TimeslotISCPInfo      DL-TimeslotISCPInfo OPTIONAL,    -- For 3.84Mcps TDD only
iE-Extensions            ProtocolExtensionContainer { { RL-information-RL-AdditionRqstTDD-ExtIEs } }    OPTIONAL,
...
}

RL-information-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD
TimeslotISCPInfoLCRTIMESLOTISCP-InformationList-LCR-RL-AdditionRqstTDD
    CRITICALITY notifyreject EXTENSION DL-
    PRESENCE optional }, -- For 1.28Mcps TDD only
  ...
}

UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  uL-TimeslotLCR-Information UL-TimeslotLCR-Information,
  iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs } }    OPTIONAL,
  ...
}

UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  dL-TimeslotLCR-Information DL-TimeslotLCR-Information,
  iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs } }    OPTIONAL,
  ...
}

DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TIMESLOTISCP-InformationList-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
  dL-TimeslotISCP-Info DL-TimeslotISCPInfoLCR,
  iE-Extensions ProtocolExtensionContainer { {TimeslotISCPInfoList-LCR-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

TimeslotISCPInfoList-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE TDD
--
-- *****
```

```
RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationPrepareTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}}    OPTIONAL,
    ...
}
```

```
RadioLinkReconfigurationPrepareTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-NodeB-CommunicationContextID          CRITICALITY    reject    TYPE          NodeB-CommunicationContextID
      PRESENCE mandatory } |
    { ID      id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD          CRITICALITY    reject    TYPE          UL-CCTrCH-
      InformationAddList-RL-ReconfPrepTDD          PRESENCE    optional    } |
    { ID      id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD          CRITICALITY    reject    TYPE          UL-CCTrCH-
      InformationModifyList-RL-ReconfPrepTDD          PRESENCE    optional    } |
    { ID      id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD          CRITICALITY    reject    TYPE          UL-CCTrCH-
      InformationDeleteList-RL-ReconfPrepTDD          PRESENCE    optional    } |
    { ID      id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD          CRITICALITY    reject    TYPE          DL-CCTrCH-
      InformationAddList-RL-ReconfPrepTDD          PRESENCE    optional    } |
    { ID      id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD          CRITICALITY    reject    TYPE          DL-CCTrCH-
      InformationModifyList-RL-ReconfPrepTDD          PRESENCE    optional    } |
    { ID      id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD          CRITICALITY    reject    TYPE          DL-CCTrCH-
      InformationDeleteList-RL-ReconfPrepTDD          PRESENCE    optional    } |
    { ID      id-TDD-DCHs-to-Modify          CRITICALITY    reject    TYPE          TDD-DCHs-to-Modify          PRESENCE    optional
    } |
    { ID      id-DCHs-to-Add-TDD          CRITICALITY    reject    TYPE          DCH-TDD-Information          PRESENCE    optional
    } |
    { ID      id-DCH-DeleteList-RL-ReconfPrepTDD          CRITICALITY    reject    TYPE          DCH-DeleteList-RL-ReconfPrepTDD
      PRESENCE    optional    } |
    { ID      id-DSCH-Information-ModifyList-RL-ReconfPrepTDD          CRITICALITY    reject    TYPE          DSCH-Information-ModifyList-RL-
      ReconfPrepTDD          PRESENCE    optional    } |
    { ID      id-DSCHs-to-Add-TDD          CRITICALITY    reject    TYPE          DSCH-TDD-Information          PRESENCE    optional    } |
    { ID      id-DSCH-Information-DeleteList-RL-ReconfPrepTDD          CRITICALITY    reject    TYPE          DSCH-Information-DeleteList-RL-
      ReconfPrepTDD          PRESENCE    optional    } |
    { ID      id-USCH-Information-ModifyList-RL-ReconfPrepTDD          CRITICALITY    reject    TYPE          USCH-Information-ModifyList-RL-
      ReconfPrepTDD          PRESENCE    optional    } |
    { ID      id-USCH-Information-Add          CRITICALITY    reject    TYPE          USCH-Information          PRESENCE    optional    } |
    { ID      id-USCH-Information-DeleteList-RL-ReconfPrepTDD          CRITICALITY    reject    TYPE          USCH-Information-DeleteList-RL-
      ReconfPrepTDD          PRESENCE    optional    } |
    { ID      id-RL-Information-RL-ReconfPrepTDD          CRITICALITY    reject    TYPE          RL-Information-RL-ReconfPrepTDD
      PRESENCE    optional    },
    ...
}
```

```
RadioLinkReconfigurationPrepareTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD
```

```

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS              TFCS,
    tFCI-Coding      TFCI-Coding,
    punctureLimit    PunctureLimit,
    ul-DPCH-InformationList  UL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions    ProtocolExtensionContainer { { UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional } | -- For 3-841.281.28Mcps TDD only
    { ID id-UL-SIRTarget CRITICALITY reject EXTENSION UL-SIR PRESENCE optional } },
    -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
    ...
}

```

```

UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}

```

```

UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationAddItem-RL-ReconfPrepTDD PRESENCE
    mandatory }
}

```

```

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    uL-Timeslot-Information  UL-Timeslot-Information,
    iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD }}

```

```

UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
    PRESENCE mandatory } | -- For 1.28Mcps TDD only
}

```

```

UL-DPCH-LCR-InformationAddListItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    uL-Timeslot-InformationLCR  UL-TimeslotLCR-Information,
    iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

}

UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID                CCTrCH-ID,
  tFCS                     TFCS                                OPTIONAL,
  tFCI-Coding              TFCI-Coding                        OPTIONAL,
  punctureLimit            PunctureLimit                    OPTIONAL,
  ul-DPCH-InformationAddList  UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD  OPTIONAL,
  ul-DPCH-InformationModifyList  UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
  ul-DPCH-InformationDeleteList  UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD  OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-DPCH-LCR-InformationModify-AddList  CRITICALITY reject  EXTENSION  UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
  PRESENCE optional } | -- For 1.28Mcps TDD only
  { ID id-UL-SIRTarget  CRITICALITY reject  EXTENSION  UL-SIR  PRESENCE optional  },
  -- This IE shall be applicable for 1.28Mcps TDD only.
  ...
}

UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}

UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD  CRITICALITY reject  TYPE UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
  PRESENCE mandatory }
}

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  uL-Timeslot-Information    UL-Timeslot-Information,
  iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD }}

```

```

UL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD-NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-LCR-InformationModify-AddItem-RL-
ReconfPrepTDD PRESENCE mandatory }
}

UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  uL-Timeslot-InformationLCR UL-TimeslotLCR-Information,
  iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD PRESENCE mandatory }
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod OPTIONAL,
  repetitionLength          RepetitionLength OPTIONAL,
  tdd-DPCHOffset            TDD-DPCHOffset OPTIONAL,
  uL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-TimeslotLCR-InformationModify-ModifyList-RL-
ReconfPrepTDD PRESENCE optional }, -- For 1.28Mcps TDD only
  ...
}

UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD -- For 3.84Mcps TDD only

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  timeSlot                  TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
  tFCI-Presence              TFCI-Presence OPTIONAL,
  uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

```

```

}

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCode TDD-ChannelisationCode OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeslotLCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfPrepTDD -- For 1.28Mcps TDD only
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR          MidambleShiftLCR OPTIONAL,
    tFCI-Presence              TFCI-Presence OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLRCR          UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLRCR OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLRCR ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD } }

```

```

UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD PRESENCE mandatory }
}

```

```

UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

```

```

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dPCH-ID DPCH-ID,
  iE-Extensions ProtocolExtensionContainer { { UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

```

```

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

```

```

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCtTrCH-ID CCTrCH-ID,
  iE-Extensions ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

```

```

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

```

```

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCtTrCH-ID CCTrCH-ID,
  tFCS TFCS,
  tFCI-Coding TFCI-Coding,
  punctureLimit PunctureLimit,
  cCtTrCH-TPCList CCTrCH-TPCAddList-RL-ReconfPrepTDD OPTIONAL,
  dl-DPCH-InformationList DL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
  OPTIONAL,
  ...
}

```

```

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD CRITICALITY reject EXTENSION DL-DPCH-LCR-
InformationAddList-RL-ReconfPrepTDD PRESENCE optional }, -- For 1.28Mcps TDD only
  ...
}

```

```

CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD -- For 3.84Mcps TDD only

```

```

CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID          CCTrCH-ID,
    iE-Extensions      ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs} }    OPTIONAL,
    ...
}

CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-InformationAddItem-RL-ReconfPrepTDD          PRESENCE
mandatory }
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dL-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }    OPTIONAL,
    ...
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD }}

DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD          PRESENCE
mandatory }
For 1.28Meps TDD only
}
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dL-Timeslot-InformationLCR DL-TimeslotLCR-Information,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }    OPTIONAL,
    ...
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

```



```

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS              TFCS,
    tFCI-Coding      TFCI-Coding,
    punctureLimit    PunctureLimit,
    cCTrCH-TPCList   CCTrCH-TPCModifyList-RL-ReconfPrepTDD,
    dl-DPCH-InformationAddList DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD OPTIONAL,
    dl-DPCH-InformationModifyList DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
    dl-DPCH-InformationDeleteList DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions    ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject EXTENSION DL-DPCH-LCR-InformationModify-
    AddList-RL-ReconfPrepTDD PRESENCE optional },
    ...
    { ID id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject EXTENSION DL-DPCH-LCR-InformationModify-
    AddList-RL-ReconfPrepTDD PRESENCE optional }

}

CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    iE-Extensions    ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD } } --
For 3.84Mcps TDD only

DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
    PRESENCE mandatory } -- For 1.28Mcps TDD only
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod  RepetitionPeriod,
    repetitionLength  RepetitionLength,
    tdd-DPCHOffset    TDD-DPCHOffset,
    dl-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions    ProtocolExtensionContainer { { DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD } }

DL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD-NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD PRESENCE mandatory }
}

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  dL-Timeslot-InformationLCR DL-TimeslotLCR-Information,
  iE-Extensions             ProtocolExtensionContainer { { DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD } }

DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD PRESENCE mandatory }
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod          OPTIONAL,
  repetitionLength          RepetitionLength          OPTIONAL,
  tdd-DPCHOffset            TDD-DPCHOffset            OPTIONAL,
  dL-Timeslot-InformationAddModify-ModifyList-RL-ReconfPrepTDD DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
  iE-Extensions             ProtocolExtensionContainer { { DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD CRITICALITY reject EXTENSION DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD PRESENCE optional },
  ...
}

DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  timeSlot                  TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,

```

```

tFCI-Presence                tFCI-Presence                OPTIONAL,
dL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD            DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD            OPTIONAL,
iE-Extensions                ProtocolExtensionContainer { { DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
...
}

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
dPCH-ID                      DPCH-ID,
tdd-ChannelisationCode       TDD-ChannelisationCode            OPTIONAL,
iE-Extensions                ProtocolExtensionContainer { { DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
...
}

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
timeSlotLCR                  TimeSlotLCR,
midambleShiftLCR            MidambleShiftLCR            OPTIONAL,
tFCI-Presence                TFCI-Presence                OPTIONAL,
dL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD        DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD        OPTIONAL,
iE-Extensions                ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
...
}

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (01..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
dPCH-ID                      DPCH-ID,
tdd-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR    OPTIONAL,
iE-Extensions                ProtocolExtensionContainer { { DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
...
}

DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

}

DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD   CRITICALITY reject          TYPE DL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dPCH-ID                DPCH-ID,
  iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCCTrCH-ID            CCTrCH-ID,
  iE-Extensions          ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD

DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dCH-ID                DCH-ID,
  iE-Extensions          ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }      OPTIONAL,
  ...
}

DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DSCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-ModifyItem-RL-ReconfPrepTDD

DSCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dSCH-ID                DSCH-ID,
  cCCTrCH-ID            CCTrCH-ID          OPTIONAL,
}

```

```

transportFormatSet      TransportFormatSet      OPTIONAL,
allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
frameHandlingPriority   FrameHandlingPriority   OPTIONAL,
toAWS                   ToAWS                   OPTIONAL,
toAWE                   ToAWE                   OPTIONAL,
transportBearerRequestIndicator TransportBearerRequestIndicator,
iE-Extensions          ProtocolExtensionContainer { { DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
...
}

DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}

DSCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-DeleteItem-RL-ReconfPrepTDD

DSCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
dSCH-ID                DSCH-ID,
iE-Extensions          ProtocolExtensionContainer { { DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
...
}

DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}

USCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-ModifyItem-RL-ReconfPrepTDD

USCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
uSCH-ID                USCH-ID,
transportFormatSet      TransportFormatSet      OPTIONAL,
allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
cCTrCH-ID              CCTrCH-ID              OPTIONAL,
transportBearerRequestIndicator TransportBearerRequestIndicator,
iE-Extensions          ProtocolExtensionContainer { { USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
...
}

USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}

USCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-DeleteItem-RL-ReconfPrepTDD

USCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
uSCH-ID                USCH-ID,
iE-Extensions          ProtocolExtensionContainer { { USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
...
}

USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```
}  
  
RL-Information-RL-ReconfPrepTDD ::= SEQUENCE {  
    rL-ID                RL-ID,  
    maxDL-Power          DL-Power OPTIONAL,  
    minDL-Power          DL-Power OPTIONAL,  
    iE-Extensions        ProtocolExtensionContainer { { RL-Information-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,  
    ...  
}  
  
RL-Information-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {  
    { ID id-InitDL-Power CRITICALITY ignore EXTENSION DL-Power PRESENCE optional },  
    ...  
}
```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- *****

RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-NodeB-CommunicationContextID      CRITICALITY    reject          TYPE NodeB-
CommunicationContextID      PRESENCE    mandatory    } |
    { ID      id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD      CRITICALITY    notify          TYPE UL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD      PRESENCE    optional    } |
    { ID      id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD      CRITICALITY    notify          TYPE UL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD      PRESENCE    optional    } |
    { ID      id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD      CRITICALITY    notify          TYPE DL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD      PRESENCE    optional    } |
    { ID      id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD      CRITICALITY    notify          TYPE DL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD      PRESENCE    optional    } |
    { ID      id-TDD-DCHs-to-Modify          CRITICALITY    reject          TYPE TDD-DCHs-to-Modify          PRESENCE optional } |
    { ID      id-DCHs-to-Add-TDD          CRITICALITY    reject          TYPE DCH-TDD-Information
PRESENCE    optional    } |
    { ID      id-DCH-DeleteList-RL-ReconfRqstTDD      CRITICALITY    reject          TYPE DCH-DeleteList-RL-
ReconfRqstTDD      PRESENCE    optional    } |
    { ID      id-RL-Information-RL-ReconfRqstTDD      CRITICALITY    ignorereject          TYPE RL-Information-RL-
ReconfRqstTDD      PRESENCE    optional    },
    ...
}

RadioLinkReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD      CRITICALITY    notify          TYPE UL-CCTrCH-
InformationModifyItem-RL-ReconfRqstTDD      PRESENCE    mandatory}
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS              OPTIONAL,
    punctureLimit     PunctureLimit    OPTIONAL,
    iE-Extensions     ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

```

```

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD          CRITICALITY    notify                                TYPE    UL-CCTrCH-
InformationDeleteItem-RL-ReconfRqstTDD          PRESENCE      mandatory}
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCtTrCH-ID                      CCTrCH-ID,
    iE-Extensions                    ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD          CRITICALITY    notify                                TYPE    DL-CCTrCH-
InformationModifyItem-RL-ReconfRqstTDD          PRESENCE      mandatory}
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCtTrCH-ID                      CCTrCH-ID,
    tFCS                             TFCS          OPTIONAL,
    punctureLimit                    PunctureLimit OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD          CRITICALITY    notify                                TYPE    DL-CCTrCH-
InformationDeleteItem-RL-ReconfRqstTDD          PRESENCE      mandatory}
}

```



```

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD

DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-ReconfRqstTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    maxDL-Power          DL-Power          OPTIONAL,
    minDL-Power          DL-Power          OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

RL-InformationItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

UNCHANGED TEXT IS REMOVED

-- *****
--
-- DL POWER TIMESLOT CONTROL REQUEST TDD
--
-- *****

DL-PowerTimeslotControlRequest ::= SEQUENCE {
 protocolIEs ProtocolIE-Container {{DL-PowerTimeslotControlRequest-IEs}},
 protocolExtensions ProtocolExtensionContainer {{DL-PowerTimeslotControlRequest-Extensions}} OPTIONAL,
 ...
}

DL-PowerTimeslotControlRequest-IEs NBAP-PROTOCOL-IES ::= {
 { ID id-NodeB-CommunicationContextID CRITICALITY ignore TYPE NodeB-CommunicationContextID PRESENCE mandatory
 } |
 { ID id-TimeslotISCPInfo CRITICALITY ignore TYPE DL-TimeslotISCPInfo PRESENCE optional }, -- Mandatory for 3.84Mcps TDD
only

...
}

DL-PowerTimeslotControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
 { ID id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD CRITICALITY ignore EXTENSION DL-TimeslotISCPInfoLCRTimeslotISCPInfoList LCR DL-PC-RqstTDD PRESENCE optional }, -- Applicable to 1.28Mcps TDD only

...
}

~~TimeslotISCPInfoList-LCR-DL-PC-RqstTDD ::= SEQUENCE {
 dl-TimeslotISCP-LCR-Info DL-TimeslotISCPInfoLCR, -- Mandatory for 1.28Mcps TDD only
 IE-Extensions ProtocolExtensionContainer ({TimeslotISCPInfoItem-LCR-DL-PC-RqstTDD-ExtIEs}) OPTIONAL,
 ...
}~~

~~TimeslotISCPInfoItem-LCR-DL-PC-RqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 ...
}~~

UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- DEDICATED MEASUREMENT INITIATION RESPONSE
--
-- *****
```

```
DedicatedMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementInitiationResponse-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{DedicatedMeasurementInitiationResponse-Extensions}}    OPTIONAL,
    ...
}

DedicatedMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore TYPE CRNC-CommunicationContextID PRESENCE
      mandatory } |
    { ID id-MeasurementID                        CRITICALITY ignore TYPE MeasurementID PRESENCE
      mandatory } |
    { ID id-DedicatedMeasurementObjectType-DM-Rsp CRITICALITY ignore TYPE DedicatedMeasurementObjectType-DM-Rsp PRESENCE
      optional } |
    { ID id-CriticalityDiagnostics              CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE
      optional },
    ...
}

DedicatedMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
    rL                RL-DM-Rsp,
    rLS               RL-Set-DM-Rsp,
    all-RL            RL-DM-Rsp,
    all-RLS           RL-Set-DM-Rsp,
    ...
}

RL-DM-Rsp ::= SEQUENCE {
    rL-InformationList-DM-Rsp    RL-InformationList-DM-Rsp,
    iE-Extensions                ProtocolExtensionContainer { { RLItem-DM-Rsp-ExtIEs } }    OPTIONAL,
    ...
}

RLItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rsp }}

RL-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rsp CRITICALITY ignore TYPE RL-InformationItem-DM-Rsp PRESENCE mandatory }
}

RL-InformationItem-DM-Rsp ::= SEQUENCE {
```

```

rL-ID                RL-ID,
dPCH-ID              DPCH-ID          OPTIONAL,
dedicatedMeasurementValue DedicatedMeasurementValue,
cFN                  CFN              OPTIONAL,
iE-Extensions        ProtocolExtensionContainer { { RL-InformationItem-DM-Rsp-ExtIEs } } OPTIONAL,
...
}

RL-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-PUSCH-Info-DM-Rsp          CRITICALITY reject          EXTENSION  PUSCH-Info-DM-Rsp          PRESENCE optional},
  -- TDD only
  ...
}

PUSCH-Info-DM-Rsp ::= SEQUENCE (SIZE (0..maxNrOfPUSCHs)) OF PUSCH-ID

RL-Set-DM-Rsp ::= SEQUENCE {
  rL-Set-InformationList-DM-Rsp      RL-Set-InformationList-DM-Rsp,
  iE-Extensions                      ProtocolExtensionContainer { { RL-SetItem-DM-Rsp-ExtIEs } } OPTIONAL,
  ...
}

RL-SetItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rsp }}

RL-Set-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
  { ID id-RL-Set-InformationItem-DM-Rsp          CRITICALITY ignore          TYPE          RL-Set-InformationItem-DM-Rsp          PRESENCE mandatory}
}

RL-Set-InformationItem-DM-Rsp ::= SEQUENCE {
  rL-Set-ID                RL-Set-ID,
  dedicatedMeasurementValue DedicatedMeasurementValue,
  cFN                      CFN              OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rsp-ExtIEs } } OPTIONAL,
  ...
}

RL-Set-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****
```

```
PhysicalSharedChannelReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container {{PhysicalSharedChannelReconfigurationRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestTDD-Extensions}} OPTIONAL,
    ...
}
```

```
PhysicalSharedChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY reject          TYPE C-ID
      PRESENCE mandatory } |
    { ID id-SFN          CRITICALITY reject          TYPE SFN
      PRESENCE optional } |
    { ID id-PDSCHSets-AddList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-AddList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PDSCHSets-ModifyList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-ModifyList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PDSCHSets-DeleteList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-DeleteList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PUSCHSets-AddList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-AddList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PUSCHSets-ModifyList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-ModifyList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PUSCHSets-DeleteList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-DeleteList-PSCH-ReconfRqst PRESENCE
      optional },
    ...
}
```

```
PhysicalSharedChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
PDSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-AddItem-PSCH-ReconfRqst
```

```
PDSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID          PDSCHSet-ID,
    pDSCH-InformationList PDSCH-Information-AddList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { {PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}
```

```
PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
      PRESENCE optional}, -- Mandatory for 1.28Mcps TDD only
    ...
}
```

```
PDSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-AddListIEs-PSCH-ReconfRqst }} -- Mandatory for
3.84Mcps TDD only
```

```

PDSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
  {ID id-PDSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE
  mandatory}
}

```

```

PDSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  dL-Timeslot-InformationAddList-PSCH-ReconfRqst DL-Timeslot-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions ProtocolExtensionContainer { {PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

```

```

PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

DL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationAddItem-PSCH-ReconfRqst

```

```

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlot TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType,
  tFCI-Presence TFCI-Presence,
  dL-Code-InformationAddList-PSCH-ReconfRqst DL-Code-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

```

```

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

DL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSSPDSCHs)) OF DL-Code-InformationAddItem-PSCH-ReconfRqst

```

```

DL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  pDSCH-ID PDSCH-ID,
  tdd-ChannelisationCode TDD-ChannelisationCode,
  iE-Extensions ProtocolExtensionContainer { { DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

```

```

DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

PDSCH-AddInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst }} Mandatory
for 1.28Meps-TDD-only

```

```

PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
  {ID id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
  PRESENCE optional}
}

```

}

```

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                RepetitionPeriod,
    repetitionLength                RepetitionLength,
    tdd-PhysicalChannelOffset       TDD-PhysicalChannelOffset,
    dl-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst    DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions                   ProtocolExtensionContainer { {PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

```

```

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst

```

```

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                    TimeSlotLCR,
    midambleShiftLCR              MidambleShiftLCR,
    tFCI-Presence                 TFCI-Presence,
    dl-Code-InformationAddList-LCR-PSCH-ReconfRqst    DL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions                 ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

```

```

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULFSPDSCHs)) OF DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst

```

```

DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                      PDSCH-ID,
    tdd-ChannelisationCodeLCR     TDD-ChannelisationCodeLCR,
    iE-Extensions                 ProtocolExtensionContainer { { DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

```

```

DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

PDSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-ModifyItem-PSCH-ReconfRqst

```

```

PDSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID                  PDSCHSet-ID,
    pDSCH-InformationList       PDSCH-InformationModifyList-PSCH-ReconfRqst,
    iE-Extensions               ProtocolExtensionContainer { {PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

```

```

PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

{ID id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst
 PRESENCE optional}, -- Mandatory for 1.28Mcps TDD only
...
}

PDSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}

PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
{ID id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-ModifyItem-PSCH-ReconfRqst
 PRESENCE optional} -- Mandatory for 3.84Mcps TDD only
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
repetitionPeriod RepetitionPeriod OPTIONAL,
repetitionLength RepetitionLength OPTIONAL,
tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
dL-Timeslot-InformationModifyList-PSCH-ReconfRqst DL-Timeslot-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
iE-Extensions ProtocolExtensionContainer {{ PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs }} OPTIONAL,
...
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
timeSlot TimeSlot,
midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
tFCI-Presence TFCI-Presence OPTIONAL,
dL-Code-InformationModifyList-PSCH-ReconfRqst DL-Code-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
iE-Extensions ProtocolExtensionContainer {{ DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs }} OPTIONAL,
...
}

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
pDSCH-ID PDSCH-ID,
tdd-ChannelisationCode TDD-ChannelisationCode,
iE-Extensions ProtocolExtensionContainer {{ DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs }} OPTIONAL,
...
}

DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```



```

PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst-NBAP-PROTOCOL-IES ::= {
  {ID id PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-ModifyInformation-LCR-
ModifyItem-PSCH-ReconfRqst PRESENCE mandatory
}
}

PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod          OPTIONAL,
  repetitionLength          RepetitionLength           OPTIONAL,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
  dL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
  iE-Extensions             ProtocolExtensionContainer { {PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs} }
  OPTIONAL,
  ...
}

PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlotLCR              TimeSlotLCR,
  midambleShiftLCR         MidambleShiftLCR          OPTIONAL,
  tFCI-Presence            TFCI-Presence             OPTIONAL,
  dL-Code-LCR-InformationModifyList-PSCH-ReconfRqst DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
  OPTIONAL,
  ...
}

DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  pDSCH-ID                 PDSCH-ID,
  tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
  iE-Extensions            ProtocolExtensionContainer { { DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
  OPTIONAL,
  ...
}

DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PDSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-DeleteItem-PSCH-ReconfRqst

PDSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
  pDSCHSet-ID              PDSCHSet-ID,
  iE-Extensions            ProtocolExtensionContainer { {PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} }
  OPTIONAL,
}

```

```

}
...
}
PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
PUSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-AddItem-PSCH-ReconfRqst
PUSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
  pUSCHSet-ID PUSCHSet-ID,
  pUSCH-InformationList PUSCH-Information-AddList-PSCH-ReconfRqst OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}
PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  {ID id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
  PRESENCE optional}, -- Mandatory for 1.28Mcps TDD only
  ...
}
PUSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-AddListIEs-PSCH-ReconfRqst }} -- Mandatory for
3.84Mcps TDD only
PUSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
  {ID id-PUSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE
  mandatory}
}
PUSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  uL-Timeslot-InformationAddList-PSCH-ReconfRqst UL-Timeslot-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions ProtocolExtensionContainer { {PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}
PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
UL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-PSCH-ReconfRqst
UL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlot TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType,
  tFCI-Presence TFCI-Presence,
  uL-Code-InformationAddList-PSCH-ReconfRqst UL-Code-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

```

```

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationAddItem-PSCH-ReconfRqst

UL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions           ProtocolExtensionContainer { { UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCH-AddInformation-PCR-PSCH-ReconfRqst ::= ProtocolIE-Container {{ PUSCH-AddInformation-PCR-AddListIEs-PSCH-ReconfRqst }}

PUSCH-AddInformation-PCR-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
  {ID id PUSCH-AddInformation-PCR-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-AddInformation-PCR-AddItem-PSCH-ReconfRqst
  PRESENCE optional}
}

PUSCH-AddInformation-PCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-PhysicalChannelOffset  TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-PCR-PSCH-ReconfRqst  UL-Timeslot-InformationAddList-PCR-PSCH-ReconfRqst,
    iE-Extensions             ProtocolExtensionContainer { {PUSCH-AddInformation-PCR-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PUSCH-AddInformation-PCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationAddList-PCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF UL-Timeslot-InformationAddItem-PCR-PSCH-ReconfRqst

UL-Timeslot-InformationAddItem-PCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotPCR              TimeSlotPCR,
    midambleShiftPCR         MidambleShiftPCR,
    tFCI-Presence            TFCI-Presence,
    uL-Code-InformationAddList-PCR-PSCH-ReconfRqst  UL-Code-InformationAddList-PCR-PSCH-ReconfRqst,
    iE-Extensions           ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-PCR-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Timeslot-InformationAddItem-PCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

UL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfUL-PSCHs)) OF UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst

UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    iE-Extensions           ProtocolExtensionContainer { { UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-ModifyItem-PSCH-ReconfRqst

PUSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID                PUSCHSet-ID,
    pUSCH-InformationList      PUSCH-Information-ModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { { PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst
    PRESENCE optional}, -- For 1.28Mcps TDD only
    ...
}

PUSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst }} -- For 3.84Mcps
TDD only

PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE mandatory}
}

PUSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod OPTIONAL,
    repetitionLength          RepetitionLength OPTIONAL,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
    uL-Timeslot-InformationModifyList-PSCH-ReconfRqst UL-Timeslot-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { { PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,

```

```

midambleShiftAndBurstType          MidambleShiftAndBurstType  OPTIONAL,
tFCI-Presence                       TFCI-Presence          OPTIONAL,
uL-Code-InformationModifyList-PSCH-ReconfRqst  UL-Code-InformationModifyList-PSCH-ReconfRqst  OPTIONAL,
iE-Extensions                       ProtocolExtensionContainer { { UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }  OPTIONAL,
...
}

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
pUSCH-ID                            PUSCH-ID,
tdd-ChannelisationCode              TDD-ChannelisationCode,
iE-Extensions                       ProtocolExtensionContainer { { UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }  OPTIONAL,
...
}

UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRqst }}

PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRqst-NBAP-PROTOCOL-IES ::= {
  {ID id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst  CRITICALITY reject  TYPE  PUSCH-ModifyInformation-LCR-
ModifyItem-PSCH-ReconfRqst  PRESENCE optional}
}

PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
repetitionPeriod                    RepetitionPeriod          OPTIONAL,
repetitionLength                    RepetitionLength         OPTIONAL,
tdd-PhysicalChannelOffset           TDD-PhysicalChannelOffset  OPTIONAL,
uL-Timeslot-InformationModifyList-LCR-PSCH-ReconfRqst  UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst  OPTIONAL,
iE-Extensions                       ProtocolExtensionContainer { {PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs} }  OPTIONAL,
...
}

PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
timeSlotLCR                         TimeSlotLCR,
midambleShiftLCR                    MidambleShiftLCR        OPTIONAL,
tFCI-Presence                       TFCI-Presence           OPTIONAL,
uL-Code-InformationModifyList-PSCH-ReconfRqst  UL-Code-InformationModifyList-PSCH-ReconfRqst  OPTIONAL,

```

```

    iE-Extensions
    OPTIONAL,
    ...
}

UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR,
    iE-Extensions            ProtocolExtensionContainer { { UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-DeleteItem-PSCH-ReconfRqst

PUSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID            PUSCHSet-ID,
    iE-Extensions            ProtocolExtensionContainer { {PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

UNCHANGED TEXT IS REMOVED

9.3.4 Information Elements Definitions

```

--*****
--
-- Information Element Definitions
--
--*****

```

```

NBAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-IEs (2) }

```

```

DEFINITIONS AUTOMATIC TAGS ::=
BEGIN

```

UNCHANGED TEXT IS REMOVED

```

-- =====
-- C
-- =====

```

UNCHANGED TEXT IS REMOVED

```

CellParameterID ::= INTEGER (0..127,...)

```

```

CellSyncBurstAvailabilityIndicator ::= ENUMERATED {
cellSyncBurstAvailable,
cellSyncBurstNotAvailable
}

```

```

CellSyncBurstCode ::= INTEGER(0..7, ...)

```

UNCHANGED TEXT IS REMOVED

```
-- =====  
-- I  
-- =====
```

UNCHANGED TEXT IS REMOVED

```
IPDL-Indicator ::= ENUMERATED {  
    active,  
    inactive  
}
```

```
IPDL-FDD-Parameters ::= SEQUENCE {  
    iP-SpacingFDD      ENUMERATED{sp5, sp7, sp10, sp15, sp20, sp30, sp40, sp50, ...},  
    iP-Length          ENUMERATED{len5, len10},  
    seed              INTEGER(±0..63),  
    burstModeParams   BurstModeParams OPTIONAL,  
    iE-Extensions     ProtocolExtensionContainer { { IPDLFDDParameter-ExtIEs } } OPTIONAL,  
    ...  
}
```

```
IPDLFDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {  
    ...  
}
```

UNCHANGED TEXT IS REMOVED

-- =====
-- T
-- =====

UNCHANGED TEXT IS REMOVED

```
TDD-ChannelisationCode ::= ENUMERATED {
  chCode1div1,
  chCode2div1,
  chCode2div2,
  chCode4div1,
  chCode4div2,
  chCode4div3,
  chCode4div4,
  chCode8div1,
  chCode8div2,
  chCode8div3,
  chCode8div4,
  chCode8div5,
  chCode8div6,
  chCode8div7,
  chCode8div8,
  chCode16div1,
  chCode16div2,
  chCode16div3,
  chCode16div4,
  chCode16div5,
  chCode16div6,
  chCode16div7,
  chCode16div8,
  chCode16div9,
  chCode16div10,
  chCode16div11,
  chCode16div12,
  chCode16div13,
  chCode16div14,
  chCode16div15,
  chCode16div16,
  ...
}
```

```
TDD-ChannelisationCodeLCR ::= SEQUENCE {
  tDD-ChannelisationCode      TDD-ChannelisationCode,
  modulation                  Modulation, -- Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD
  iE-Extensions               ProtocolExtensionContainer { { TDD-ChannelisationCodeLCR-ExtIEs} } OPTIONAL,
  ...
}
```

```
TDD-ChannelisationCodeLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

TDD-DL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem

UNCHANGED TEXT IS REMOVED

9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****

NBAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Constants (4)}

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

UNCHANGED TEXT IS REMOVED

-- *****
--
-- IEs
--
-- *****

id-AICH-Information                               ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd        ProtocolIE-ID ::= 1
id-BCH-Information                               ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd        ProtocolIE-ID ::= 8
id-BCCH-ModificationTime                       ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator                   ProtocolIE-ID ::= 10
id-Cause                                       ProtocolIE-ID ::= 13
id-CCP-InformationItem-AuditRsp               ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp              ProtocolIE-ID ::= 15
id-CCP-InformationItem-ResourceStatusInd      ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp              ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd     ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp              ProtocolIE-ID ::= 19
id-CellParameterID                            ProtocolIE-ID ::= 23
id-CFN                                         ProtocolIE-ID ::= 24
id-C-ID                                        ProtocolIE-ID ::= 25
id-CommonMeasurementAccuracy                  ProtocolIE-ID ::= 39
id-CommonMeasurementObjectType-CM-Rprt        ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst       ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp        ProtocolIE-ID ::= 33
id-CommonMeasurementType                     ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID                   ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD ProtocolIE-ID ::= 37
id-CommunicationControlPortID                ProtocolIE-ID ::= 40
id-ConfigurationGenerationID                 ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID               ProtocolIE-ID ::= 44

```

id-CriticalityDiagnostics	ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD	ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD	ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 54
id-DCH-DeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 55
id-DCH-FDD-Information	ProtocolIE-ID ::= 56
id-DCH-TDD-Information	ProtocolIE-ID ::= 57
id-DCH-InformationResponse	ProtocolIE-ID ::= 59
id-FDD-DCHs-to-Modify	ProtocolIE-ID ::= 62
id-TDD-DCHs-to-Modify	ProtocolIE-ID ::= 63
id-DCH-ModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 65
id-DedicatedMeasurementObjectType-DM-Rprt	ProtocolIE-ID ::= 67
id-DedicatedMeasurementObjectType-DM-Rqst	ProtocolIE-ID ::= 68
id-DedicatedMeasurementObjectType-DM-Rsp	ProtocolIE-ID ::= 69
id-DedicatedMeasurementType	ProtocolIE-ID ::= 70
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 72
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 73
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 76
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 79
id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 83
id-DL-ReferencePowerInformationItem-DL-PC-Rqst	ProtocolIE-ID ::= 84
id-DLReferencePower	ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 86
id-DSCH-AddItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 87
id-DSCHs-to-Add-FDD	ProtocolIE-ID ::= 89
id-DSCH-DeleteItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 91
id-DSCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 100
id-DSCH-InformationResponse	ProtocolIE-ID ::= 105
id-DSCH-FDD-Information	ProtocolIE-ID ::= 106
id-DSCH-TDD-Information	ProtocolIE-ID ::= 107
id-DSCH-ModifyItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 108
id-DSCH-ModifyList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 112
id-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 113
id-FACH-Information	ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd	ProtocolIE-ID ::= 123
id-Local-Cell-ID	ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 5

id-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 128
id-AdjustmentPeriod	ProtocolIE-ID ::= 129
id-MaxAdjustmentStep	ProtocolIE-ID ::= 130
id-MaximumTransmissionPower	ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 132
id-MeasurementID	ProtocolIE-ID ::= 133
id-MessageStructure	ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst	ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID	ProtocolIE-ID ::= 143
id-NeighbouringCellMeasurementInformation	ProtocolIE-ID ::= 455
id-P-CCPCH-Information	ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 145
id-P-CPICH-Information	ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 147
id-P-SCH-Information	ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 156
id-PCH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 157
id-PCH-Information	ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 165
id-PICH-Information	ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 168
id-PowerAdjustmentType	ProtocolIE-ID ::= 169
id-PRACH-Information	ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 176
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 189
id-RACH-Information	ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 197
id-ReportCharacteristics	ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 200

id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD	ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRqst	ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRqstFDD	ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRqstFDD	ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRqst	ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 214
id-RL-InformationList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 215
id-RL-InformationList-RL-SetupRqstFDD	ProtocolIE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady	ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-ReconfRsp	ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 221
id-RL-InformationResponseList-RL-ReconfReady	ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-ReconfRsp	ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 225
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 228
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 229
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure	ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 241
id-RL-Set-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 242
id-S-CCPCH-Information	ProtocolIE-ID ::= 247
id-S-CPICH-Information	ProtocolIE-ID ::= 249
id-SCH-Information	ProtocolIE-ID ::= 251
id-S-SCH-Information	ProtocolIE-ID ::= 253
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD	ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD	ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 264
id-SecondarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate	ProtocolIE-ID ::= 266
id-SFN	ProtocolIE-ID ::= 268
id-ShutdownTimer	ProtocolIE-ID ::= 269
id-Start-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 114

id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 270
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 271
id-SyncCase	ProtocolIE-ID ::= 274
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH	ProtocolIE-ID ::= 275
id-T-Cell	ProtocolIE-ID ::= 276
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 277
id-TimeSlotConfigurationList-Cell-SetupRqstTDD	ProtocolIE-ID ::= 278
id-TransmissionDiversityApplied	ProtocolIE-ID ::= 279
id-TypeOfError	ProtocolIE-ID ::= 508
id-UARFCNforNt	ProtocolIE-ID ::= 280
id-UARFCNforNd	ProtocolIE-ID ::= 281
id-UARFCNforNu	ProtocolIE-ID ::= 282
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 284
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 285
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 288
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 289
id-UL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 291
id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 293
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 294
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 295
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 296
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 297
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD	ProtocolIE-ID ::= 300
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD	ProtocolIE-ID ::= 301
id-USCH-Information-Add	ProtocolIE-ID ::= 302
id-USCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 304
id-USCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 306
id-USCH-InformationResponse	ProtocolIE-ID ::= 309
id-USCH-Information	ProtocolIE-ID ::= 310
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id-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 316
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id-AP-AICH-Information	ProtocolIE-ID ::= 320
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id-CauseLevel-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 324
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id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 329
id-CDCA-ICH-Information	ProtocolIE-ID ::= 330
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode	ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag	ProtocolIE-ID ::= 335
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id-CPCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 342
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 349

id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 353
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id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 357
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id-PCPCH-Information	ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 380
id-PRACHConstant	ProtocolIE-ID ::= 381
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id-SSDT-CellIDforEDSCHPC	ProtocolIE-ID ::= 443
id-Synchronisation-Configuration-Cell-ReconfRqst	ProtocolIE-ID ::= 393
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id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 398
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 403
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 407
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 408
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 409
id-CommunicationContextInfoItem-Reset	ProtocolIE-ID ::= 412
id-CommunicationControlPortInfoItem-Reset	ProtocolIE-ID ::= 414
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id-TFCI2-Bearer-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 417
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD	ProtocolIE-ID ::= 418
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id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20

id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
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id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD	ProtocolIE-ID ::= 494
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 482
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id-DwPCH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 90
id-DwPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 97
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 99
id-DwPCH-LCR-Information-ResourceStatusInd	ProtocolIE-ID ::= 101
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 154
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 174
id-FPACH-LCR-Information	ProtocolIE-ID ::= 290
id-FPACH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 292
id-FPACH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 22
id-FPACH-LCR-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 311
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 312
id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 313
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 314

id-PCCPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 456
id-PCH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 457
id-PCH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 458
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 459
id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 460
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id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 471
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 472
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 473
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 474
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 475
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 476
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 477
id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 478
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 479
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD	ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 481
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id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 484
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id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 486
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id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 488
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 489
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 490
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 491
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 493
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id-SyncReportType-CellSyncReprtTDD	ProtocolIE-ID ::= 497
id-PUSCH-Info-DM-Rqst	ProtocolIE-ID ::= 505
id-PUSCH-Info-DM-Rsp	ProtocolIE-ID ::= 506
id-PUSCH-Info-DM-Rprt	ProtocolIE-ID ::= 507
id-InitDL-Power	ProtocolIE-ID ::= 509
id-cellSyncBurstRepetitionPeriod	ProtocolIE-ID ::= 511
id-ReportCharacteristicsType-OnModification	ProtocolIE-ID ::= 512
id-SFNFSNMeasurementValueInformation	ProtocolIE-ID ::= 513
id-SFNFSNMeasurementThresholdInformation	ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation	ProtocolIE-ID ::= 515
id-TUTRANGPSMeasurementThresholdInformation	ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 520
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END

CHANGE REQUEST

⌘ **25.433 CR 672** ⌘ rev **1** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ NBAP Review – Alignment of the ASN.1		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May 2002
Category:	⌘ A	Release:	⌘ REL-5
<p>Use <u>one</u> of the following categories:</p> <p>F (essential correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (Addition of feature),</p> <p>C (Functional modification of feature)</p> <p>D (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>REL-4 (Release 4)</p> <p>REL-5 (Release 5)</p>	

Reason for change:	⌘ The tabular format is not fully aligned on the ASN.1 description.
Summary of change:	⌘ This CR corrects the ASN.1 description in the following cases:
	<p>R1:</p> <p><u>9.3.3:</u></p> <ul style="list-style-type: none"> - In RESOURCE STATUS INDICATION message: <ul style="list-style-type: none"> - The range of the sequence defining "FPACH-LCR-InformationList-ResourceStatusInd" is corrected from (0..Max) to (1..Max). - In RADIO LINK SETUP REQUEST TDD message: <ul style="list-style-type: none"> - The TimeslotISCP-LCR-InfoList-RL-SETUPRqstTDD is replaced by DL-TimeslotISCPInfoLCR and its definition is removed. - In RADIO LINK ADDITION REQUEST TDD message: <ul style="list-style-type: none"> - The TIMESLOTISCP-LCR-InfoList-RL-SETUPAdditionTDD is replaced by DL-TimeslotISCPInfoLCR and its definition is removed. - In RADIO LINK RECONFIGURATION PREPARE TDD message: <ul style="list-style-type: none"> - The range of the sequence defining "DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD" is corrected from (0..Max) to (1..Max). - In DL POWER TIMESLOT CONTROL REQUEST TDD message: <ul style="list-style-type: none"> - The TimeslotISCP-LCR-InfoList-DL-PC-RqstTDD is replaced by DL-TimeslotISCPInfoLCR and its definition is removed. - In DEDICATED MEASUREMENT INITIATION RESPONSE message: <ul style="list-style-type: none"> - The range of the sequence defining "PUSCH-Info-DM-Rsp" is corrected from (0..Max) to (1..Max).

R0:

9.3.3:

- Imports List:
 - The CellSyncBurstAvailabilityIndicator IE is not used anywhere in the section 9.3.3, so it is removed from the list of imported NBAP IEs.
 - Ids are removed when corrections rendered them obsolete.
- In COMMON TRANSPORT CHANNEL SETUP REQUEST TDD message:
 - The ASN.1 definition is changed to avoid the redundant use of a ProtocolIE- Single-Container for the following IEs that are already defined in an Extension Container (Criticality is defined twice for the same IE):
 - PICH-LCR-Parameters-CTCH-SetupRqstTDD,
 - Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD,
 - PRACH-LCR-ParametersList-CTCH-SetupRqstTDD,
 - FPACH-LCR-Parameters-CTCH-SetupRqstTDD.
- In AUDIT RESPONSE message:
 - The ASN.1 definition is changed to avoid the redundant use of a ProtocolIE- Single-Container for the following IE that is already defined in an Extension Container (Criticality is defined twice for the same IE):
 - DwPCH-LCR-InformationList-AuditRsp.
- In COMMON MEASUREMENT INITIATION REQUEST message:
 - The extension in the "CommonMeasurementInitiationRequest-Extensions" is put before the "..." as it was agreed to do.
- In COMMON MEASUREMENT INITIATION RESPONSE message,
 - The extension in the "CommonMeasurementInitiationResponse-Extensions" is put before the "..." as it was agreed to do.
- In CELL RECONFIGURATION REQUEST TDD message,
 - The type of the "pCCPCH-Power" IE in the "PCCPCH-Information-Cell-ReconfRqstTDD" IE is corrected from "DL-Power" to "PCCPCH-Power". => Isolated impact correction (but non backward compatible).
- In RESOURCE STATUS INDICATION message:
 - The "FPACH-LCR-InformationList-ResourceStatusInd" and the "DwPCH-LCR-Information-ResourceStatusInd" extensions are removed from "Local-Cell-InformationItem-ResourceStatusInd-ExtIEs" and put in "Cell-InformationItem-ResourceStatusInd-ExtIEs" (this is in line with the tabular format in 9.1.32, and with the intention of the specification).
- In RADIO LINK SETUP REQUEST TDD message:
 - The ASN.1 definition is changed to avoid the redundant use of a ProtocolIE- Single-Container for the following IEs that are already defined in an Extension Container (Criticality is defined twice for the same IE):
 - UL-DPCH-LCR-Information-RL-SetupRqstTDD,
 - DL-DPCH-LCR-Information-RL-SetupRqstTDD.
- In RADIO LINK ADDITION REQUEST TDD message:
 - The extension in the "UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs" is put before the "..." as it was agreed to do.
 - The presence of "TIMESLOTISCP-InformationList-LCR-RL-AdditionRqstTDD" extension is corrected to "reject". For the time being the presence of DL Time Slot ISCP Info LCR IE is "reject" in the tabular format (see 9.1.39.2) and "notify" in the ASN.1. For consistency reasons (see also Radio Link Setup procedure), the presence is corrected in the ASN.1.
- In RADIO LINK RECONFIGURATION PREPARE TDD message:
 - The extension in the "DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs" is put before the "..." as it was agreed to do.
 - In "UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs", the first extension is corrected to contain "LCR" (it currently reuses the HCR TDD IEs and not IEs specifically designed for LCR TDD...). The comment is also updated. Furthermore, the ASN.1 definition of "UL-DPCH-LCR-

- InformationAddList-RL-ReconfPrepTDD" is changed to avoid the redundant use of a ProtocolIE-Single-Container for IEs that are already defined in an Extension Container (Criticality is defined twice for the same IE).
- Furthermore, the ASN.1 definition is also changed to avoid the redundant use of a ProtocolIE-Single-Container for the following IEs that are already defined in an Extension Container (Criticality is defined twice for the same IE):
 - UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
 - DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
 - DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD.
 - In RADIO LINK RECONFIGURATION REQUEST TDD message, the criticality of the "id-RL-Information-RL-ReconfRqstTDD" IE has been corrected to "reject". This is in line with the tabular format and the intention of the specification (i.e. consistent with the criticality for this IE in the RADIO LINK RECONFIGURATION PREPARE TDD message).
 - In PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message:
 - A comment is added to indicate that the Extension identified by "id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst" is for LCR TDD only.
 - The "DL-Code-InformationAddList-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfULTSs" in the ASN.1 and "maxnoofPDSCHs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.
 - The "DL-Code-InformationAddList-LCR-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfULTSs" in the ASN.1 and "maxnoofPDSCHs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.
 - The "UL-Code-InformationAddList-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfPDSCHs" in the ASN.1 and "maxnoofPUSCHs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.
 - The "UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfDLTSLCRs" in the ASN.1 and "maxnoofULTSLCRs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.
 - The "UL-Code-InformationAddList-LCR-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfULTSs" in the ASN.1 and "maxnoofPUSCHs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.
 - The "UL-Code-LCR-InformationModifyList-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfPDSCHs" in the ASN.1 and "maxnoofPUSCHs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.
 - Furthermore the ASN.1 definition is changed to avoid the redundant use of a ProtocolIE-Single-Container for the following IEs that are already defined in an Extension Container (Criticality is defined twice for the same IE):
 - PDSCH-AddInformation-LCR-PSCH-ReconfRqst,
 - PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
 - PUSCH-AddInformation-LCR-PSCH-ReconfRqst,
 - PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst.

9.3.4:

- CellSyncBurstAvailabilityIndicator:
 - This IE is not used anywhere in the ASN.1, so its definition is removed (and it can be removed from the list of "Imports" in 9.3.3).
- Seed in IPDL-FDD-Parameters:
 - This is defined as an INTEGER(0..63) in the tabular format and an INTEGER(1..63) in the ASN.1. To be in line with TS 25.423 (where it is defined as an INTEGER(0..63) both in the tabular format and the ASN.1), this is corrected to INTEGER(0..63) in the ASN.1.

- TDD-ChannelisationCodeLCR:
 - The sequence has a "..." at the end, but there is no Extension Container. An Extension Container is added.

9.3.6:

- Ids are removed when corrections rendered them obsolete.

Impact Analysis:

Impact assessment towards the previous version of the specification (same release): this CR has impact on the previous version of the specification (same release) under the protocol point of view as the ASN.1 is modified for several procedures.

Consequences if not approved: ☹ If this CR is not approved, then the discrepancy between the tabular format and the ASN.1 will remain.

Clauses affected: ☹ 9.3.3, 9.3.4, 9.3.6

Other specs affected:	☹ <input checked="" type="checkbox"/> Other core specifications	☹ TS 25.433 v 3.9.0 CR 702 TS 25.433 v 4.4.0 CR 671
	<input type="checkbox"/> Test specifications	
	<input type="checkbox"/> O&M Specifications	

Other comments: ☹

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ☹ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.3.3 PDU Definitions

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-- *****
--
-- PDU definitions for NBAP.
--
-- *****

NBAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

UNCHANGED TEXT IS REMOVED

IMPORTS
  Active-Pattern-Sequence-Information,
  AddorDeleteIndicator,
  AICH-Power,
  AICH-TransmissionTiming,
  AllocationRetentionPriority,
  APPreambleSignature,
  APSubChannelNumber,
  AvailabilityStatus,
  BCCH-ModificationTime,
  BindingID,
  BlockingPriorityIndicator,
  SCTD-Indicator,
  Cause,
  CCTrCH-ID,
  CDSubChannelNumbers,
  CellParameterID,
  CellSyncBurstAvailabilityIndicator,
  CellSyncBurstCode,
  CellSyncBurstCodeShift,
  CellSyncBurstRepetitionPeriod,
  CellSyncBurstSIR,
  CellSyncBurstTiming,
  CellSyncBurstTimingThreshold,
  CFN,
  Channel-Assignment-Indication,
  ChipOffset,
  C-ID,
  Closedlooptimingadjustmentmode,
  CommonChannelsCapacityConsumptionLaw,
  Compressed-Mode-Deactivation-Flag,
  CommonMeasurementAccuracy,
  CommonMeasurementType,

```


CommonMeasurementValue,
CommonMeasurementValueInformation,
CommonPhysicalChannelID,
Common-PhysicalChannel-Status-Information,
Common-TransportChannel-Status-Information,
CommonTransportChannelID,
CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue,
CriticalityDiagnostics,
CPCH-Allowed-Total-Rate,
CPCHScramblingCodeNumber,
CPCH-UL-DPCCH-SlotFormat,
CRNC-CommunicationContextID,
CSBMeasurementID,
CSBTransmissionID,
DCH-FDD-Information,
DCH-InformationResponse,
DCH-ID,
FDD-DCHs-to-Modify,
TDD-DCHs-to-Modify,
DCH-TDD-Information,
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DelayedActivation,
DelayedActivationUpdate,
DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-DPCH-TimingAdjustment,
DL-or-Global-CapacityCredit,
DL-Power,
DL-PowerBalancing-Information,
DL-PowerBalancing-ActivationIndicator,
DLPowerAveragingWindowSize,
DL-PowerBalancing-UpdatedIndicator,
DL-ScramblingCode,
DL-TimeslotISCP,
DL-Timeslot-Information,
DL-TimeslotLCR-Information,
DL-TimeslotISCPInfo,
DL-TimeslotISCPInfoLCR,
DL-TPC-Pattern01Count,
DPC-Mode,
DPCH-ID,
DSCH-ID,
DSCH-FDD-Common-Information,
DSCH-FDD-Information,
DSCH-InformationResponse,
DSCH-TDD-Information,

DwPCH-Power,
End-Of-Audit-Sequence-Indicator,
EnhancedDSCHPC,
EnhancedDSCHPCCounter,
EnhancedDSCHPCIndicator,
EnhancedDSCHPCWnd,
EnhancedDSCHPowerOffset,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FPACH-Power,
FrameAdjustmentValue,
FrameHandlingPriority,
FrameOffset,
HS-PDSCH-FDD-Code-Information,
HS-SCCH-ID,
HS-SCCH-FDD-Code-Information,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,
IB-Type,
IndicationType,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
InnerLoopDLPCStatus,
IPDL-FDD-Parameters,
IPDL-TDD-Parameters,
IPDL-Indicator,
LimitedPowerIncrease,
Local-Cell-ID,
MaximumDL-PowerCapability,
Maximum-PDSCH-Power,
MaximumTransmissionPower,
Max-Number-of-PCPCHes,
MaxNrOfUL-DPDCHs,
MaxPRACH-MidambleShifts,
MeasurementFilterCoefficient,
MeasurementID,
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftLCR,
MinimumDL-PowerCapability,
MinSpreadingFactor,
MinUL-ChannelisationCodeLength,
MultiplexingPosition,
NEOT,
NCyclesPerSFNperiod,
NFmax,

NRepetitionsPerCyclePeriod,
N-INSYNC-IND,
N-OUTSYNC-IND,
NeighbouringCellMeasurementInformation,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation,
NodeB-CommunicationContextID,
NStartMessage,
PagingIndicatorLength,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PCP-Length,
PDSCH-CodeMapping,
PDSCHSet-ID,
PDSCH-ID,
PICH-Mode,
PICH-Power,
PowerAdjustmentType,
PowerOffset,
PowerRaiseLimit,
PRACH-Midamble,
PreambleSignatures,
PreambleThreshold,
PredictedSFNSFNDeviationLimit,
PredictedTUTRANGPSDeviationLimit,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
SCH-TimeSlot,
PunctureLimit,
PUSCHSet-ID,
PUSCH-ID,
QE-Selector,
RACH-SlotFormat,
RACH-SubChannelNumbers,
ReferenceClockAvailability,
ReferenceSFNOffset,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
RequestedDataValue,
RequestedDataValueInformation,
ResourceOperationalState,
RL-Set-ID,
RL-ID,
RL-Specific-DCH-Info,
Received-total-wide-band-power-Value,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
RNC-ID,
ScramblingCodeNumber,
SecondaryCCPCH-SlotFormat,

Segment-Type,
S-FieldLength,
SFN,
SFNSFNChangeLimit,
SFNSFNDriftRate,
SFNSFNDriftRateQuality,
SFNSFNQuality,
ShutdownTimer,
SIB-Originator,
SpecialBurstScheduling,
SignallingBearerRequestIndicator,
SSDT-Cell-Identity,
SSDT-CellID-Length,
SSDT-Indication,
Start-Of-Audit-Sequence-Indicator,
STTD-Indicator,
SSDT-SupportIndicator,
SyncCase,
SYNCdlCodeId,
SyncFrameNumber,
SynchronisationReportCharacteristics,
SynchronisationReportType,
T-Cell,
T-RLFAILURE,
TDD-ChannelisationCode,
TDD-ChannelisationCodeLCR,
TDD-DL-Code-LCR-Information,
TDD-DPCHOffset,
TDD-TPC-DownlinkStepSize,
TDD-PhysicalChannelOffset,
TDD-UL-Code-LCR-Information,
TFCI2-BearerInformationResponse,
TFCI2BearerRequestIndicator,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TFCS,
TimeSlot,
TimeSlotLCR,
TimeSlotDirection,
TimeSlotStatus,
TimingAdjustmentValue,
TimingAdvanceApplied,
ToAWE,
ToAWS,
TransmissionDiversityApplied,
TransmitDiversityIndicator,
TransmissionGapPatternSequenceCodeInformation,
Transmission-Gap-Pattern-Sequence-Information,
TransportBearerRequestIndicator,
TransportFormatSet,
TransportLayerAddress,

```
TSTD-Indicator,
TUTRANGPS,
TUTRANGPSChangeLimit,
TUTRANGPSDriftRate,
TUTRANGPSDriftRateQuality,
TUTRANGPSQuality,
UARFCN,
UC-Id,
USCH-Information,
USCH-InformationResponse,
UL-CapacityCredit,
UL-DPCCH-SlotFormat,
UL-SIR,
UL-FP-Mode,
UL-PhysCH-SF-Variation,
UL-ScramblingCode,
UL-Timeslot-Information,
UL-TimeslotLCR-Information,
UL-TimeSlot-ISCP-Info,
UL-TimeSlot-ISCP-LCR-Info,
UL-TimeslotISCP-Value,
UL-TimeslotISCP-Value-IncrDecrThres,
USCH-ID,
HSDSCH-FDD-Information,
HSDSCH-FDD-Information-Response,
HSDSCH-Information-to-Modify,
HSDSCH-MACdFlow-ID,
HSDSCH-RNTI,
HSDSCH-TDD-Information,
HSDSCH-TDD-Information-Response,
PrimaryCCPCH-RSCP
FROM NBAP-IEs

PrivateIE-Container{},
ProtocolExtensionContainer{},
ProtocolIE-Container{},
ProtocolIE-Single-Container{},
ProtocolIE-ContainerList{},
NBAP-PRIVATE-IES,
NBAP-PROTOCOL-IES,
NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers

id-Active-Pattern-Sequence-Information,
id-AdjustmentRatio,
id-AICH-Information,
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-AP-AICH-Information,
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-BCH-Information,
id-BCCH-ModificationTime,
id-bindingID,
id-BlockingPriorityIndicator,
```

id-Cause,
id-CauseLevel-PSCH-ReconfFailureTDD,
id-CauseLevel-RL-AdditionFailureFDD,
id-CauseLevel-RL-AdditionFailureTDD,
id-CauseLevel-RL-ReconfFailure,
id-CauseLevel-RL-SetupFailureFDD,
id-CauseLevel-RL-SetupFailureTDD,
id-CauseLevel-SyncAdjustmntFailureTDD,
id-CCP-InformationItem-AuditRsp,
id-CCP-InformationList-AuditRsp,
id-CCP-InformationItem-ResourceStatusInd,
id-CCTrCH-InformationItem-RL-FailureInd,
id-CCTrCH-InformationItem-RL-RestoreInd,
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD,
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD,
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD,
id-CDCA-ICH-Information,
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD,
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD,
id-Cell-InformationItem-AuditRsp,
id-Cell-InformationItem-ResourceStatusInd,
id-Cell-InformationList-AuditRsp,
id-CellParameterID,
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD,
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD,
id-cellSyncBurstRepetitionPeriod,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD,
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD,
id-CellSyncInfo-CellSyncReprtTDD,
id-CFN,
id-CFNReportingIndicator,
id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD,
id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID,
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-CPCH-Information,
id-CPCH-Parameters-CTCH-SetupRsp,

id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-CSBTransmissionID,
id-CSBMeasurementID,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,
id-DCH-RearrangeList-Bearer-RearrangeInd,
id-DSCH-RearrangeList-Bearer-RearrangeInd,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DelayedActivation,
id-DelayedActivationList-RL-ActivationCmdFDD,
id-DelayedActivationList-RL-ActivationCmdTDD,
id-DelayedActivationInformation-RL-ActivationCmdFDD,
id-DelayedActivationInformation-RL-ActivationCmdTDD,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-TimingAdjustment,
id-DL-PowerBalancing-Information,
id-DL-PowerBalancing-ActivationIndicator,
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,
id-DL-PowerBalancing-UpdatedIndicator,
id-DLReferencePower,

id-DLReferencePowerList-DL-PC-Rqst,
id-DL-TPC-Pattern01Count,
id-DPC-Mode,
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteList-RL-ReconfPrepFDD,
id-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-FDD-Common-Information,
id-DSCH-TDD-Information,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-End-Of-Audit-Sequence-Indicator,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator,
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRqstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstTDD,
id-IndicationType-ResourceStatusInd,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rqst,
id-InformationExchangeObjectType-InfEx-Rsp,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationReportCharacteristics,
id-InformationType,
id-InitDL-Power,
id-InnerLoopDLPCStatus,
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
id-IPDLParameter-Information-Cell-ReconfRqstFDD,
id-IPDLParameter-Information-Cell-SetupRqstFDD,
id-IPDLParameter-Information-Cell-ReconfRqstTDD,
id-IPDLParameter-Information-Cell-SetupRqstTDD,
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
id-Limited-power-increase-information-Cell-SetupRqstFDD,
id-Local-Cell-ID,
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp,
id-Local-Cell-InformationItem-ResourceStatusInd,
id-Local-Cell-InformationItem2-ResourceStatusInd,
id-Local-Cell-InformationList-AuditRsp,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,

id-MaximumTransmissionPower,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,
id-NCyclesPerSFNperiod,
id-NeighbouringCellMeasurementInformation,
id-NodeB-CommunicationContextID,
id-NRepetitionsPerCyclePeriod,
id-P-CCPCH-Information,
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRqstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRqstTDD,
id-PCH-Parameters-CTCH-SetupRsp,
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstTDD,
id-PCH-Information,
id-PCPCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRqstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PDSCH-Information-Cell-SetupRqstFDD,
id-PDSCH-Information-Cell-ReconfRqstFDD,
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PDSCHSets-AddList-PSCH-ReconfRqst,
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRqstTDD,
id-PICH-ParametersItem-CTCH-SetupRqstTDD,
id-PowerAdjustmentType,
id-Power-Local-Cell-Group-InformationItem-AuditRsp,
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList-AuditRsp,
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd,
id-Power-Local-Cell-Group-ID,
id-PRACH-Information,
id-PRACHConstant,
id-PRACH-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRqstFDD,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,
id-PrimarySCH-Information-Cell-SetupRqstFDD,
id-PrimaryScramblingCode,
id-SCH-Information-Cell-ReconfRqstTDD,
id-SCH-Information-Cell-SetupRqstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst,

id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PUSCHConstant,
id-PUSCHSets-AddList-PSCH-ReconfRqst,
id-PUSCHSets-DeleteList-PSCH-ReconfRqst,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,
id-RACH-ParametersItem-CTCH-SetupRqstFDD,
id-RACH-ParameterItem-CTCH-SetupRqstTDD,
id-ReferenceClockAvailability,
id-ReferenceSFNoffset,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRqstFDD,
id-RL-informationItem-RL-DeletionRqst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
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id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-informationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRqstFDD,
id-RL-InformationList-RL-SetupRqstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-ReconfRqstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-RL-Specific-DCH-Info,
id-S-CCPCH-Information,

id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-SecondarySCH-Information-Cell-ReconfRqstFDD,
id-SecondarySCH-Information-Cell-SetupRqstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-SignallingBearerRequestIndicator,
id-SSDT-CellIDforEDSCHPC,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH,
id-SyncFrameNumber,
id-SynchronisationReportType,
id-SynchronisationReportCharacteristics,
id-SyncReportType-CellSyncReprtTDD,
id-T-Cell,
id-TargetCommunicationControlPortID,
id-TFCI2-Bearer-Information-RL-SetupRqstFDD,
id-TFCI2-BearerInformationResponse,
id-TFCI2BearerRequestIndicator,
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-timeslotInfo-CellSyncInitiationRqstTDD,
id-TimeslotISCPInfo,
id-TimingAdvanceApplied,
id-TransmissionDiversityApplied,
id-transportlayeraddress,
id-UARFCNforNt,
id-UARFCNforNd,
id-UARFCNforNu,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,

id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
 id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
 id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
 id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
 id-UL-DPCH-InformationItem-RL-AdditionRqstTDD,
 id-UL-DPCH-InformationList-RL-SetupRqstTDD,
 id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
 id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
 id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
 id-UL-DPCH-Information-RL-ReconfPrepFDD,
 id-UL-DPCH-Information-RL-ReconfRqstFDD,
 id-UL-DPCH-Information-RL-SetupRqstFDD,
 id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD,
 id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,
 id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD,
 id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,
 id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
 id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,
 id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,
 id-USCH-Information-Add,
 id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
 id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
 id-USCH-InformationResponse,
 id-USCH-Information,
 id-USCH-RearrangeList-Bearer-RearrangeInd,
 id-DL-DPCH-LCR-Information-RL-SetupRqstTDD,
~~id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD,~~
 id-DwPCH-LCR-Information,
~~id-DwPCH-LCR-Information-AuditRsp,~~
 id-DwPCH-LCR-InformationList-AuditRsp,
 id-DwPCH-LCR-Information-Cell-SetupRqstTDD,
 id-DwPCH-LCR-Information-Cell-ReconfRqstTDD,
 id-DwPCH-LCR-Information-ResourceStatusInd,
 id-maxFACH-Power-LCR-CTCH-SetupRqstTDD,
 id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD,
 id-FPACH-LCR-Information,
 id-FPACH-LCR-Information-AuditRsp,
 id-FPACH-LCR-InformationList-AuditRsp,
 id-FPACH-LCR-InformationList-ResourceStatusInd,
 id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD,
~~id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD,~~
 id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD,
 id-PCCPCH-LCR-Information-Cell-SetupRqstTDD,
 id-PCH-Power-LCR-CTCH-SetupRqstTDD,
 id-PCH-Power-LCR-CTCH-ReconfRqstTDD,
 id-PICH-LCR-Parameters-CTCH-SetupRqstTDD,
~~id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD,~~
 id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD,
~~id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD,~~
 id-RL-InformationResponse-LCR-RL-SetupRspTDD,
~~id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD,~~
 id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD,
 id-TimeSlot,

id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD,
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD,
id-TimeSlotLCR-CM-Rqst,
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD,
~~id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD,~~
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD,
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
~~id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,~~
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
~~id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,~~
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD,
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD,
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-LCR-InformationModify-AddList,
~~id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,~~
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD,
id-UL-SIRTarget,
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-Info-DM-Rqst,
id-PUSCH-Info-DM-Rsp,
id-PUSCH-Info-DM-Rprt,
id-RL-InformationResponse-LCR-RL-AdditionRspTDD,
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD,
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD,
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst,
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst,
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst,
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst,
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst,
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-neighbouringTDDCellMeasurementInformationLCR,
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD,
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD,
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD,
id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD,
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRqstTDD,
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD,
id-SyncDLCodeIdThreInfoLCR,
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD,
id-DwPCH-Power,
id-Angle-Of-Arrival-Value-LCR,

id-HSDSCH-FDD-Information,
id-HSDSCH-FDD-Information-Response,
id-HSDSCH-FDD-Information-to-Add,
id-HSDSCH-FDD-Information-to-Delete,
id-HSDSCH-Information-to-Modify,
id-HSDSCH-RNTI,
id-HSDSCH-TDD-Information,
id-HSDSCH-TDD-Information-Response,
id-HSDSCH-TDD-Information-Response-LCR,
id-HSDSCH-TDD-Information-to-Add,
id-HSDSCH-TDD-Information-to-Delete,
id-HSPDSCH-RL-ID,
id-PrimCCPCH-RSCP-DL-PC-RqstTDD,

maxNrOfCCTrCHs,
maxNrOfCellSyncBursts,
maxNrOfCodes,
maxNrOfCPCHs,
maxNrOfDCHs,
maxNrOfDLTSs,
maxNrOfDLTSLCRs,
maxNrOfDPCHs,
maxNrOfDSCHs,
maxNrOfFACHs,
maxNrOfRLs,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfRLSets,
maxNrOfPCPCHs,
maxNrOfPDSCHs,
maxNrOfPUSCHs,
maxNrOfPRACHLCRs,
maxNrOfPDSCHSets,
maxNrOfPUSCHSets,
maxNrOfReceptsPerSyncFrame,
maxNrOfSCCPCHs,
maxNrOfSCCPCHLCRs,
maxNrOfULTSs,
maxNrOfULTSLCRs,
maxNrOfUSCHs,
maxAPSigNum,
maxCPCHCell,
maxFACHCell,
maxFPACHCell,
maxNoofLen,
maxRACHCell,
maxPCPCHCell,
maxPRACHCell,
maxSCCPCHCell,
maxSCPICHCell,
maxCellinNodeB,
maxCCPinNodeB,
maxCommunicationContext,

```
maxLocalCellInNodeB,  
maxNrOfSlotFormatsPRACH,  
maxNrOfCellSyncBursts,  
maxNrOfReceptsPerSyncFrame,  
maxIB,  
maxIBSEG,  
maxNrOfHSSCCHs,  
maxNoOfSyncFramesLCR,  
maxNrofreceptionsperSyncFrameLCR,  
maxNrOfMACdFlows  
FROM NBAP-Constants;
```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP REQUEST TDD
--
-- *****

CommonTransportChannelSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelSetupRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CommonTransportChannelSetupRequestTDD-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-C-ID          CRITICALITY reject    TYPE    C-ID
      PRESENCE mandatory }|
    { ID    id-ConfigurationGenerationID    CRITICALITY reject    TYPE    ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID    id-CommonPhysicalChannelType-CTCH-SetupRqstTDD    CRITICALITY ignore    TYPE    CommonPhysicalChannelType-CTCH-
SetupRqstTDD          PRESENCE mandatory },
    ...
}

CommonTransportChannelSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonPhysicalChannelType-CTCH-SetupRqstTDD ::= CHOICE {
    secondary-CCPCH-parameters    Secondary-CCPCH-CTCH-SetupRqstTDD,
    pRACH-parameters              PRACH-CTCH-SetupRqstTDD,
    ...
}

Secondary-CCPCH-CTCH-SetupRqstTDD ::= SEQUENCE {
    sCCPCH-CCTrCH-ID              CCTrCH-ID,
    tFCS                           TFCS,
    tFCI-Coding                    TFCI-Coding,
    punctureLimit                  PunctureLimit,
    secondaryCCPCH-parameterList    Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD,
    fACH-ParametersList            FACH-ParametersList-CTCH-SetupRqstTDD    OPTIONAL,
    pCH-Parameters                 PCH-Parameters-CTCH-SetupRqstTDD    OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer {{Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs}}    OPTIONAL,
    ...
}

Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID    id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD    CRITICALITY reject    EXTENSION    Secondary-CCPCH-LCR-
parameterList-CTCH-SetupRqstTDD    PRESENCE    optional }, -- Mandatory for 1.28Mcps TDD only
    ...
}

Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD }}

Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {

```



```

    { ID id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD PRESENCE
    mandatory } -- Mandatory for 3.84Mcps TDD only
}

```

```

Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD

```

```

Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    tdd-ChannelisationCode           TDD-ChannelisationCode,
    timeslot                          TimeSlot,
    midambleShiftAndBurstType        MidambleShiftAndBurstType,
    tdd-PhysicalChannelOffset        TDD-PhysicalChannelOffset,
    repetitionPeriod                 RepetitionPeriod,
    repetitionLength                 RepetitionLength,
    s-CCPCH-Power                    DL-Power,
    iE-Extensions                    ProtocolExtensionContainer { { Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

FACH-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstTDD }}

```

```

FACH-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE FACH-ParametersListIE-CTCH-SetupRqstTDD PRESENCE mandatory }
}

```

```

FACH-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstTDD

```

```

FACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    fACH-CCTrCH-ID                  CCTrCH-ID,
    dl-TransportFormatSet           TransportFormatSet,
    toAWS                           ToAWS,
    toAWE                            ToAWE,
    iE-Extensions                   ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-maxFACH-Power-LCR-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION DL-Power PRESENCE optional }|
    -- For 1.28Mcps TDD only
    { ID id-bindingID CRITICALITY ignore EXTENSION BindingID PRESENCE optional }|
    { ID id-transportlayeraddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
    ...
}

```

```

PCH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRqstTDD }}

```

```

PCH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersItem-CTCH-SetupRqstTDD CRITICALITY reject TYPE PCH-ParametersItem-CTCH-SetupRqstTDD PRESENCE mandatory }
}

```

```

}

PCH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonTransportChannelID          CommonTransportChannelID,
    pCH-CCTrCH-ID                     CCTrCH-ID,
    dl-TransportFormatSet             TransportFormatSet,
    toAWS                              ToAWS,
    toAWE                              ToAWE,
    pICH-Parameters                   PICH-Parameters-CTCH-SetupRqstTDD,
    iE-Extensions                     ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PCH-Power-LCR-CTCH-SetupRqstTDD          CRITICALITY reject          EXTENSION DL-Power          PRESENCE optional }|
    -- For 1.28Mcps TDD only
    { ID id-PICH-LCR-Parameters-CTCH-SetupRqstTDD    CRITICALITY reject          EXTENSION          PICH-LCR-Parameters-CTCH-
SetupRqstTDD          PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only
    { ID id-bindingID                               CRITICALITY ignore          EXTENSION BindingID          PRESENCE optional }|
    { ID id-transportlayeraddress                   CRITICALITY ignore          EXTENSION TransportLayerAddress PRESENCE optional },
    ...
}

PICH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-SetupRqstTDD }}

PICH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PICH-ParametersItem-CTCH-SetupRqstTDD    CRITICALITY reject          TYPE PICH-ParametersItem-CTCH-SetupRqstTDD PRESENCE optional }
}
-- Mandatory for 3.84Mcps TDD only

PICH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    tdd-ChannelisationCode           TDD-ChannelisationCode,
    timeSlot                          TimeSlot,
    midambleShiftAndBurstType         MidambleShiftAndBurstType,
    tdd-PhysicalChannelOffset         TDD-PhysicalChannelOffset,
    repetitionPeriod                  RepetitionPeriod,
    repetitionLength                  RepetitionLength,
    pagingIndicatorLength             PagingIndicatorLength,
    pICH-Power                        PICH-Power,
    iE-Extensions                     ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PICH-LCR-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-LCR-ParametersIE-CTCH-SetupRqstTDD }}

PICH-LCR-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD CRITICALITY reject TYPE PICH-LCR-ParametersItem-CTCH-SetupRqstTDD PRESENCE mandatory }
}
-- Mandatory for 1.28Mcps TDD

```

```

PICH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR        TDD-ChannelisationCodeLCR,
    timeSlotLCR                      TimeSlotLCR,
    midambleShiftLCR                MidambleShiftLCR,
    tdd-PhysicalChannelOffset        TDD-PhysicalChannelOffset,
    repetitionPeriod                 RepetitionPeriod,
    repetitionLength                 RepetitionLength,
    pagingIndicatorLength            PagingIndicatorLength,
    pICH-Power                       PICH-Power,
    iE-Extensions                    ProtocolExtensionContainer { { PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE Single Container { { Secondary-CCPCH-LCR-parameterListIEs-CTCH-SetupRqstTDD } }

Secondary-CCPCH-LCR-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD
    PRESENCE optional } Mandatory for 1.28Meps-TDD-only
}

Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHLCRs)) OF Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD

Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR        TDD-ChannelisationCodeLCR,
    timeslotLCR                      TimeSlotLCR,
    midambleShiftLCR                MidambleShiftLCR,
    tdd-PhysicalChannelOffset        TDD-PhysicalChannelOffset,
    repetitionPeriod                 RepetitionPeriod,
    repetitionLength                 RepetitionLength,
    s-CCPCH-Power                    DL-Power,
    iE-Extensions                    ProtocolExtensionContainer { { Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PRACH-CTCH-SetupRqstTDD ::= SEQUENCE {
    pRACH-Parameters-CTCH-SetupRqstTDD,
    iE-Extensions                    ProtocolExtensionContainer { { PRACH-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

PRACH-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

{ ID id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION PRACH-LCR-ParametersList-CTCH-
SetupRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only
{ ID id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION FPACH-LCR-Parameters-CTCH-
SetupRqstTDD PRESENCE optional }, -- Mandatory for 1.28Mcps TDD only
...
}

PRACH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersIE-CTCH-SetupRqstTDD }}

PRACH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-ParametersItem-CTCH-SetupRqstTDD CRITICALITY reject TYPE PRACH-ParametersItem-CTCH-SetupRqstTDD PRESENCE optional }
} -- Mandatory for 3.84Mcps TDD only

PRACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  tFCS TFCS,
  timeslot TimeSlot,
  tdd-ChannelisationCode TDD-ChannelisationCode,
  maxPRACH-MidambleShifts MaxPRACH-MidambleShifts,
  pRACH-Midamble PRACH-Midamble,
  rACH RACH-Parameter-CTCH-SetupRqstTDD,
  iE-Extensions ProtocolExtensionContainer { { PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RACH-Parameter-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ RACH-ParameterIE-CTCH-SetupRqstTDD }}

RACH-ParameterIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-ParameterItem-CTCH-SetupRqstTDD CRITICALITY reject TYPE RACH-ParameterItem-CTCH-SetupRqstTDD PRESENCE mandatory }
}

RACH-ParameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonTransportChannelID CommonTransportChannelID,
  uL-TransportFormatSet TransportFormatSet,
  iE-Extensions ProtocolExtensionContainer { { RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-bindingID CRITICALITY ignore EXTENSION BindingID PRESENCE optional }|
  { ID id-transportlayeraddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
  ...
}

PRACH-LCR-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-LCR-ParametersListIEs-CTCH-SetupRqstTDD }}

PRACH-LCR-ParametersListIEs-CTCH-SetupRqstTDD-NBAP-PROTOCOL-IES ::= {

```

```

{ ID id PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD PRESENCE optional }
}

```

```
PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfPRACHLCRs)) OF PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD
```

```
PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    tFCS                          TFCS,
    timeslotLCR                  TimeSlotLCR,
    tdd-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR,
    maxPRACH-MidambleShifts     MaxPRACH-MidambleShifts,
    pRACH-Midamble               PRACH-Midamble,
    rACH                         RACH-Parameter-CTCH-SetupRqstTDD,
    iE-Extensions                ProtocolExtensionContainer { { PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}
```

```
PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
FPACH-LCR-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FPACH-LCR-ParametersIE-CTCH-SetupRqstTDD }}
```

```
FPACH-LCR-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
{ ID id FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD CRITICALITY reject TYPE FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD PRESENCE optional }
}

```

```
FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR,
    timeslotLCR                  TimeSlotLCR,
    midambleShiftLCR            MidambleShiftLCR,
    fPACH-Power                  FPACH-Power,
    iE-Extensions                ProtocolExtensionContainer { { FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}
```

```
FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- AUDIT RESPONSE
--
-- *****

AuditResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{AuditResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{AuditResponse-Extensions}}    OPTIONAL,
    ...
}

AuditResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-End-Of-Audit-Sequence-Indicator    CRITICALITY    ignore    TYPE    End-Of-Audit-Sequence-Indicator    PRESENCE    mandatory } |
    { ID    id-Cell-InformationList-AuditRsp      CRITICALITY    ignore    TYPE    Cell-InformationList-AuditRsp    PRESENCE
    optional } |
    { ID    id-CCP-InformationList-AuditRsp      CRITICALITY    ignore    TYPE    CCP-InformationList-AuditRsp    PRESENCE    optional
    } |
    -- CCP (Communication Control Port) --
    { ID    id-Local-Cell-InformationList-AuditRsp    CRITICALITY    ignore    TYPE    Local-Cell-InformationList-AuditRsp    PRESENCE
    optional } |
    { ID    id-Local-Cell-Group-InformationList-AuditRsp    CRITICALITY    ignore    TYPE    Local-Cell-Group-InformationList-AuditRsp    PRESENCE
    optional } |
    { ID    id-CriticalityDiagnostics            CRITICALITY    ignore    TYPE    CriticalityDiagnostics            PRESENCE    optional
    },
    ...
}

AuditResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID    id-Power-Local-Cell-Group-InformationList-AuditRsp    CRITICALITY    ignore    EXTENSION    Power-Local-Cell-Group-
    InformationList-AuditRsp    PRESENCE    optional    },
    ...
}

Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-AuditRsp}}

Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID    id-Cell-InformationItem-AuditRsp    CRITICALITY    ignore    TYPE    Cell-InformationItem-AuditRsp    PRESENCE    optional }
}

Cell-InformationItem-AuditRsp ::= SEQUENCE {
    c-ID                    C-ID,
    configurationGenerationID    ConfigurationGenerationID,
    resourceOperationalState    ResourceOperationalState,
    availabilityStatus        AvailabilityStatus,
    local-Cell-ID            Local-Cell-ID,
    primary-SCH-Information    P-SCH-Information-AuditRsp    OPTIONAL,
    secondary-SCH-Information    S-SCH-Information-AuditRsp    OPTIONAL,
    primary-CPICH-Information    P-CPICH-Information-AuditRsp    OPTIONAL,
    secondary-CPICH-InformationList    S-CPICH-InformationList-AuditRsp    OPTIONAL,
    primary-CCPCH-Information    P-CCPCH-Information-AuditRsp    OPTIONAL,
    bCH-Information          BCH-Information-AuditRsp    OPTIONAL,
    secondary-CCPCH-InformationList    S-CCPCH-InformationList-AuditRsp    OPTIONAL,
}

```

```

pCH-Information          PCH-Information-AuditRsp          OPTIONAL,
pICH-Information         PICH-Information-AuditRsp          OPTIONAL,
fACH-InformationList     FACH-InformationList-AuditRsp      OPTIONAL,
pRACH-InformationList    PRACH-InformationList-AuditRsp     OPTIONAL,
rACH-InformationList     RACH-InformationList-AuditRsp     OPTIONAL,
aICH-InformationList     AICH-InformationList-AuditRsp     OPTIONAL,
pCPCH-InformationList    PCPCH-InformationList-AuditRsp    OPTIONAL,
cPCH-InformationList     CPCH-InformationList-AuditRsp     OPTIONAL,
aP-AICH-InformationList AP-AICH-InformationList-AuditRsp  OPTIONAL,
cDCA-ICH-InformationList CDCA-ICH-InformationList-AuditRsp  OPTIONAL,
sCH-Information          SCH-Information-AuditRsp          OPTIONAL,
iE-Extensions           ProtocolExtensionContainer { { Cell-InformationItem-AuditRsp-ExtIEs } }  OPTIONAL,
...
}

Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-FPACH-LCR-InformationList-AuditRsp          CRITICALITY ignore  EXTENSION  FPACH-LCR-InformationList-AuditRsp          PRESENCE optional } |
  -- For 1.28Mcps TDD only
  { ID id-DwPCH-LCR-InformationList-AuditRsp          CRITICALITY ignore  EXTENSION  DwPCH-LCR-InformationList-AuditRspCommon-PhysicalChannel-Status-
  Information                                           PRESENCE optional },
  -- For 1.28Mcps TDD only
  ...
}

P-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-AuditRsp }}

P-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-SCH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-AuditRsp }}

S-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-SCH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CPICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-AuditRsp }}

P-CPICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CPICH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-CPICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-AuditRsp }}

S-CPICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-CPICH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CCPCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-AuditRsp }}

P-CCPCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CCPCH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

```

```

BCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ BCH-InformationIE-AuditRsp }}

BCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-BCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

S-CCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-AuditRsp }}

S-CCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

PCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PCH-InformationIE-AuditRsp }}

PCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PICH-InformationIE-AuditRsp }}

PICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

FACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-AuditRsp }}

FACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PRACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-AuditRsp }}

PRACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

RACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-AuditRsp }}

RACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-AuditRsp }}

AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

PCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-AuditRsp }}

PCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE optional }
}

```



```

CPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-AuditRsp }}

CPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CPCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE optional }
}

AP-AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-AuditRsp }}

AP-AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-AP-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

CDCA-ICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-AuditRsp }}

CDCA-ICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CDCA-ICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ SCH-InformationIE-AuditRsp }}

SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-SCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

CCP-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-AuditRsp }}

CCP-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CCP-InformationItem-AuditRsp  CRITICALITY  ignore  TYPE  CCP-InformationItem-AuditRsp  PRESENCE mandatory }
}

CCP-InformationItem-AuditRsp ::= SEQUENCE {
  communicationControlPortID  CommunicationControlPortID,
  resourceOperationalState  ResourceOperationalState,
  availabilityStatus  AvailabilityStatus,
  iE-Extensions  ProtocolExtensionContainer  {{ CCP-InformationItem-AuditRsp-ExtIEs }}  OPTIONAL,
  ...
}

CCP-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

FPACH-LCR-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-AuditRsp }}

FPACH-LCR-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-FPACH-LCR-Information-AuditRsp  CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

DWPCH-LCR-InformationList-AuditRsp ::= ProtocolIE-Single-Container {{ DWPCH-LCR-InformationIE-AuditRsp }}

DWPCH-LCR-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {

```

```

{ ID id-DwPCH-LCR-Information-AuditRsp CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
}

```

```

Local-Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-AuditRsp }}

```

```

Local-Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-InformationItem-AuditRsp CRITICALITY ignore TYPE Local-Cell-InformationItem-AuditRsp PRESENCE mandatory }
}

```

```

Local-Cell-InformationItem-AuditRsp ::= SEQUENCE {
  local-Cell-ID Local-Cell-ID,
  dl-or-global-capacityCredit DL-or-Global-CapacityCredit,
  ul-capacityCredit UL-CapacityCredit OPTIONAL,
  commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw,
  dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw,
  maximumDL-PowerCapability MaximumDL-PowerCapability OPTIONAL,
  minSpreadingFactor MinSpreadingFactor OPTIONAL,
  minimumDL-PowerCapability MinimumDL-PowerCapability OPTIONAL,
  local-Cell-Group-ID Local-Cell-ID OPTIONAL,
  iE-Extensions ProtocolExtensionContainer {{ Local-Cell-InformationItem-AuditRsp-ExtIEs }} OPTIONAL,
  ...
}

```

```

Local-Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-ReferenceClockAvailability CRITICALITY ignore EXTENSION ReferenceClockAvailability PRESENCE optional } |
  { ID id-Power-Local-Cell-Group-ID CRITICALITY ignore EXTENSION Local-Cell-ID PRESENCE optional },
  ...
}

```

```

Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-InformationItemIE-AuditRsp }}

```

```

Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-Group-InformationItem-AuditRsp CRITICALITY ignore TYPE Local-Cell-Group-InformationItem-AuditRsp PRESENCE mandatory }
}

```

```

Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
  local-Cell-Group-ID Local-Cell-ID,
  dl-or-global-capacityCredit DL-or-Global-CapacityCredit,
  ul-capacityCredit UL-CapacityCredit OPTIONAL,
  commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw,
  dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw,
  iE-Extensions ProtocolExtensionContainer {{ Local-Cell-Group-InformationItem-AuditRsp-ExtIEs }} OPTIONAL,
  ...
}

```

```

Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```
Power-Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-Cell-Group-InformationItemIE-AuditRsp }}
```

```
Power-Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID      id-Power-Local-Cell-Group-InformationItem-AuditRsp      CRITICALITY  ignore      TYPE  Power-Local-Cell-Group-InformationItem-
  AuditRsp      PRESENCE      mandatory}
}
```

```
Power-Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
  power-Local-Cell-Group-ID      Local-Cell-ID,
  maximumDL-PowerCapability      MaximumDL-PowerCapability,
  iE-Extensions                  ProtocolExtensionContainer  {{ Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}  OPTIONAL,
  ...
}
```

```
Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- COMMON MEASUREMENT INITIATION REQUEST
--
-- *****

CommonMeasurementInitiationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonMeasurementInitiationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonMeasurementInitiationRequest-Extensions}}    OPTIONAL,
    ...
}

CommonMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-MeasurementID                CRITICALITY reject          TYPE      MeasurementID                PRESENCE
      mandatory   }|
    { ID      id-CommonMeasurementObjectType-CM-Rqst          CRITICALITY reject          TYPE      CommonMeasurementObjectType-CM-Rqst          PRESENCE
      mandatory   }|
    -- This IE represents both the Common Measurement Object Type IE and the choice based on the Common Measurement Object Type
    -- as described in the tabular message format in subclause 9.1.
    { ID      id-CommonMeasurementType          CRITICALITY reject          TYPE      CommonMeasurementType                PRESENCE mandatory
      }|
    { ID      id-MeasurementFilterCoefficient          CRITICALITY reject          TYPE      MeasurementFilterCoefficient          PRESENCE
      optional   }|
    { ID      id-ReportCharacteristics          CRITICALITY reject          TYPE      ReportCharacteristics                PRESENCE mandatory
      }|
    { ID      id-SFNReportingIndicator          CRITICALITY reject          TYPE      SFNReportingIndicator                PRESENCE mandatory
      }|
    { ID      id-SFN                              CRITICALITY reject          TYPE      SFN                                  PRESENCE optional
      },
    ...
}

CommonMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-CommonMeasurementAccuracy          CRITICALITY reject          EXTENSION CommonMeasurementAccuracy          PRESENCE optional},
    ...
    {ID id-CommonMeasurementAccuracy          CRITICALITY reject          EXTENSION CommonMeasurementAccuracy          PRESENCE optional}
}

CommonMeasurementObjectType-CM-Rqst ::= CHOICE {
    cell                Cell-CM-Rqst,
    rACH                RACH-CM-Rqst,
    cPCH                CPCH-CM-Rqst,
    ...
}

Cell-CM-Rqst ::= SEQUENCE {
    c-ID                C-ID,
    timeSlot            TimeSlot    OPTIONAL,    -- For 3.84Mcps TDD only
    iE-Extensions       ProtocolExtensionContainer    {{ CellItem-CM-Rqst-ExtIEs }}    OPTIONAL,
    ...
}

CellItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

    { ID id-TimeSlotLCR-CM-Rqst      CRITICALITY reject      EXTENSION TimeSlotLCR      PRESENCE optional }| -- For 1.28Mcps TDD only
    { ID id-NeighbouringCellMeasurementInformation  CRITICALITY ignore      EXTENSION NeighbouringCellMeasurementInformation  PRESENCE
optional},
    ...
}

RACH-CM-Rqst ::= SEQUENCE {
    c-ID                C-ID,
    commonTransportChannelID  CommonTransportChannelID,
    iE-Extensions      ProtocolExtensionContainer { { RACHItem-CM-Rqst-ExtIEs } }      OPTIONAL,
    ...
}

RACHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCH-CM-Rqst ::= SEQUENCE {
    c-ID                C-ID,
    commonTransportChannelID  CommonTransportChannelID,
    spreadingfactor      MinUL-ChannelisationCodeLength      OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { { CPCHItem-CM-Rqst-ExtIEs } }      OPTIONAL,
    ...
}

CPCHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- COMMON MEASUREMENT INITIATION RESPONSE
--
-- *****

CommonMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonMeasurementInitiationResponse-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CommonMeasurementInitiationResponse-Extensions}}    OPTIONAL,
    ...
}

CommonMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID          CRITICALITY ignore          TYPE MeasurementID          PRESENCE
      mandatory }|
    { ID id-CommonMeasurementObjectType-CM-Rsp  CRITICALITY ignore          TYPE CommonMeasurementObjectType-CM-Rsp  PRESENCE optional
      }|
    { ID id-SFN                      CRITICALITY ignore          TYPE SFN                      PRESENCE
      optional }|
    { ID id-CriticalityDiagnostics  CRITICALITY ignore          TYPE CriticalityDiagnostics          PRESENCE optional },
    ...
}

CommonMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
 {ID id-CommonMeasurementAccuracy          CRITICALITY ignore          EXTENSION CommonMeasurementAccuracy          PRESENCE optional},
 ...
 {ID id-CommonMeasurementAccuracy          CRITICALITY ignore          EXTENSION CommonMeasurementAccuracy          PRESENCE optional}
}

CommonMeasurementObjectType-CM-Rsp ::= CHOICE {
    cell          Cell-CM-Rsp,
    rACH          RACH-CM-Rsp,
    cPCH          CPCH-CM-Rsp,
    ...
}

Cell-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue,
    iE-Extensions                  ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs } }    OPTIONAL,
    ...
}

CellItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RACH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue,
    iE-Extensions                  ProtocolExtensionContainer { { RACHItem-CM-Rsp-ExtIEs } }    OPTIONAL,
    ...
}

RACHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```
    ...
}

CPCH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue      CommonMeasurementValue,
    iE-Extensions                ProtocolExtensionContainer { { CPCHItem-CM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

CPCHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- CELL RECONFIGURATION REQUEST TDD
--
-- *****
```

```
CellReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellReconfigurationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellReconfigurationRequestTDD-Extensions}}    OPTIONAL,
    ...
}

CellReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY reject TYPE C-ID
      PRESENCE mandatory }|
    { ID id-ConfigurationGenerationID CRITICALITY reject TYPE ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID id-Synchronisation-Configuration-Cell-ReconfRqst CRITICALITY reject TYPE Synchronisation-Configuration-
Cell-ReconfRqst PRESENCE optional }|
    { ID id-TimingAdvanceApplied CRITICALITY reject TYPE TimingAdvanceApplied
      PRESENCE optional }| -- For 3.84Mcps TDD only
    { ID id-SCH-Information-Cell-ReconfRqstTDD CRITICALITY reject TYPE SCH-Information-Cell-
ReconfRqstTDD PRESENCE optional }| -- For 3.84Mcps TDD only
    { ID id-PCCPCH-Information-Cell-ReconfRqstTDD CRITICALITY reject TYPE PCCPCH-Information-Cell-
ReconfRqstTDD PRESENCE optional }|
    { ID id-MaximumTransmissionPower CRITICALITY reject TYPE MaximumTransmissionPower
      PRESENCE optional }|
    { ID id-DPCHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE optional }|
    { ID id-PUSCHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE optional }|
    { ID id-PRACHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE optional }|
    { ID id-TimeSlotConfigurationList-Cell-ReconfRqstTDD CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-
ReconfRqstTDD PRESENCE optional }, -- For 3.84Mcps TDD only
    ...
}

CellReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-
Cell-ReconfRqstTDD PRESENCE optional}| -- Mandatory for 1.28Mcps TDD only
    { ID id-DwPCH-LCR-Information-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION DwPCH-LCR-Information-Cell-
ReconfRqstTDD PRESENCE optional}| -- Mandatory for 1.28Mcps TDD only
    { ID id-IPDLParameter-Information-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION IPDLParameter-Information-
Cell-ReconfRqstTDD PRESENCE optional }| -- For 3.84Mcps TDD only
    { ID id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION IPDLParameter-
Information-LCR-Cell-ReconfRqstTDD PRESENCE optional }, -- For 1.28Mcps TDD only
    ...
}

SCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    sCH-Power DL-Power,
```



```

    iE-Extensions          ProtocolExtensionContainer { { PSCH-Information-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PSCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCCPCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    pCCPCH-Power                 DLPCCPCH-Power,
    iE-Extensions                ProtocolExtensionContainer { { PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-ReconfRqstTDD

TimeSlotConfigurationItem-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlot                    TimeSlot,
    timeSlotStatus              TimeSlotStatus,
    timeSlotDirection           TimeSlotDirection,
    iE-Extensions                ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD

TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR                 TimeSlotLCR,
    timeSlotStatus              TimeSlotStatus,
    timeSlotDirection           TimeSlotDirection,
    iE-Extensions                ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DwPCH-LCR-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    dwPCH-Power                  DwPCH-Power,
    iE-Extensions                ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

```

```
DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {  
  ...  
}
```

```
IPDLParameter-Information-Cell-ReconfRqstTDD ::= SEQUENCE {  
  iPDL-TDD-Parameters          IPDL-TDD-Parameters    OPTIONAL,  
  iPDL-Indicator                IPDL-Indicator,  
  iE-Extensions                 ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,  
  ...  
}
```

```
IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {  
  ...  
}
```

```
IPDLParameter-Information-LCR-Cell-ReconfRqstTDD ::= SEQUENCE {  
  iPDL-TDD-Parameters-LCR      IPDL-TDD-Parameters-LCR    OPTIONAL,  
  iPDL-Indicator                IPDL-Indicator,  
  iE-Extensions                 ProtocolExtensionContainer { { IPDLParameter-Information-LCR-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,  
  ...  
}
```

```
IPDLParameter-Information-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {  
  ...  
}
```

UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- RESOURCE STATUS INDICATION
--
-- *****
```

```
ResourceStatusIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{ResourceStatusIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{ResourceStatusIndication-Extensions}}          OPTIONAL,
    ...
}

ResourceStatusIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-IndicationType-ResourceStatusInd          CRITICALITY ignore          TYPE IndicationType-ResourceStatusInd          PRESENCE
      mandatory }|
    -- This IE represents both the Indication Type IE and the choice based on the indication type as described in the tabular message format in
    subclause 9.1.
    { ID id-Cause          CRITICALITY ignore          TYPE Cause          PRESENCE
      optional },
    ...
}

ResourceStatusIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IndicationType-ResourceStatusInd ::= CHOICE {
    no-Failure          No-Failure-ResourceStatusInd,
    serviceImpacting   ServiceImpacting-ResourceStatusInd,
    ...
}

No-Failure-ResourceStatusInd ::= SEQUENCE {
    local-Cell-InformationList          Local-Cell-InformationList-ResourceStatusInd,
    local-Cell-Group-InformationList    Local-Cell-Group-InformationList-ResourceStatusInd OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { No-FailureItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
    ...
}

No-FailureItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Power-Local-Cell-Group-InformationList-ResourceStatusInd          CRITICALITY ignore          EXTENSION Power-Local-
      Cell-Group-InformationList-ResourceStatusInd          PRESENCE optional },
    ...
}

Local-Cell-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-
  InformationItemIE-ResourceStatusInd }}

Local-Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-InformationItem-ResourceStatusInd          CRITICALITY ignore          TYPE Local-Cell-InformationItem-ResourceStatusInd          PRESENCE
      mandatory }
}
}
```

```

Local-Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
    local-CellID                Local-Cell-ID,
    addorDeleteIndicator        AddorDeleteIndicator,
    dl-or-global-capacityCredit DL-or-Global-CapacityCredit    OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    ul-capacityCredit           UL-CapacityCredit    OPTIONAL,
    commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw    OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw    OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    maximumDL-PowerCapability    MaximumDL-PowerCapability    OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    minSpreadingFactor          MinSpreadingFactor            OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    minimumDL-PowerCapability    MinimumDL-PowerCapability    OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    local-Cell-Group-ID         Local-Cell-ID            OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { { Local-Cell-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

Local-Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 { ID id-FPACH-InformationList-ResourceStatusInd CRITICALITY ignore EXTENSION FPACH-InformationList-ResourceStatusInd
 PRESENCE optional } } for 1.28Meps-TDD only
 { ID id-DwPCH-Information-ResourceStatusInd CRITICALITY ignore EXTENSION DwPCH-Information-ResourceStatusInd PRESENCE optional
 } } for 1.28Meps-TDD only
    { ID id-ReferenceClockAvailability CRITICALITY ignore EXTENSION ReferenceClockAvailability PRESENCE optional } |
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add" and the Local Cell is related to a TDD cell
    { ID id-Power-Local-Cell-Group-ID CRITICALITY ignore EXTENSION Local-Cell-ID PRESENCE optional },
    ...
}

Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container { { Local-Cell-Group-InformationItemIE-ResourceStatusInd } }

Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-Group-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-Group-InformationItem-ResourceStatusInd PRESENCE mandatory }
}

Local-Cell-Group-InformationItem-ResourceStatusInd ::= SEQUENCE {
    local-Cell-Group-ID         Local-Cell-ID,
    dl-or-global-capacityCredit DL-or-Global-CapacityCredit,
    ul-capacityCredit           UL-CapacityCredit    OPTIONAL,
    commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw,
    dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw,
    iE-Extensions               ProtocolExtensionContainer { { Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

Power-Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-Cell-Group-InformationItemIE-ResourceStatusInd }}

Power-Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
 { ID id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Power-Local-Cell-Group-InformationItem-ResourceStatusInd PRESENCE mandatory }
 }

Power-Local-Cell-Group-InformationItem-ResourceStatusInd ::= SEQUENCE {
 power-Local-Cell-Group-ID Local-Cell-ID,
 maximumDL-PowerCapability MaximumDL-PowerCapability,
 iE-Extensions ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs } }
 OPTIONAL,
 ...
 }

Power-Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 ...
 }

ServiceImpacting-ResourceStatusInd ::= SEQUENCE {
 local-Cell-InformationList Local-Cell-InformationList2-ResourceStatusInd OPTIONAL,
 local-Cell-Group-InformationList Local-Cell-Group-InformationList2-ResourceStatusInd OPTIONAL,
 cCP-InformationList CCP-InformationList-ResourceStatusInd OPTIONAL,
 cell-InformationList Cell-InformationList-ResourceStatusInd OPTIONAL,
 iE-Extensions ProtocolExtensionContainer { { ServiceImpactingItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
 ...
 }

ServiceImpactingItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 { ID id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd CRITICALITY ignore EXTENSION Power-Local-Cell-Group-InformationList2-ResourceStatusInd PRESENCE optional },
 ...
 }

Local-Cell-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE2-ResourceStatusInd }}

Local-Cell-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
 { ID id-Local-Cell-InformationItem2-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-InformationItem2-ResourceStatusInd PRESENCE mandatory }
 }

Local-Cell-InformationItem2-ResourceStatusInd ::= SEQUENCE {
 local-Cell-ID Local-Cell-ID,
 dl-or-global-capacityCredit DL-or-Global-CapacityCredit OPTIONAL,
 ul-capacityCredit UL-CapacityCredit OPTIONAL,
 commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw OPTIONAL,
 dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
 maximum-DL-PowerCapability MaximumDL-PowerCapability OPTIONAL,
 minSpreadingFactor MinSpreadingFactor OPTIONAL,
 minimumDL-PowerCapability MinimumDL-PowerCapability OPTIONAL,
 }

```

    iE-Extensions          ProtocolExtensionContainer { { Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-ReferenceClockAvailability CRITICALITY ignore EXTENSION ReferenceClockAvailability PRESENCE optional } |
    { ID id-Power-Local-Cell-Group-ID CRITICALITY ignore EXTENSION Local-Cell-ID PRESENCE optional },
    ...
}

Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container { { Local-Cell-Group-InformationItemIE2-ResourceStatusInd } }

Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-Group-InformationItem2-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-Group-InformationItem2-ResourceStatusInd PRESENCE mandatory }
}

Local-Cell-Group-InformationItem2-ResourceStatusInd ::= SEQUENCE {
    local-Cell-Group-ID Local-Cell-ID,
    dl-or-global-capacityCredit DL-or-Global-CapacityCredit OPTIONAL,
    ul-capacityCredit UL-CapacityCredit OPTIONAL,
    commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw OPTIONAL,
    dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Power-Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container { { Power-Local-Cell-Group-InformationItemIE2-ResourceStatusInd } }

Power-Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd CRITICALITY ignore TYPE Power-Local-Cell-Group-InformationItem2-ResourceStatusInd PRESENCE mandatory }
}

Power-Local-Cell-Group-InformationItem2-ResourceStatusInd ::= SEQUENCE {
    power-Local-Cell-Group-ID Local-Cell-ID,
    maximumDL-PowerCapability MaximumDL-PowerCapability,
    iE-Extensions ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

CCP-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-ResourceStatusInd }}

CCP-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-CCP-InformationItem-ResourceStatusInd  CRITICALITY ignore  TYPE CCP-InformationItem-ResourceStatusInd  PRESENCE mandatory }
}

CCP-InformationItem-ResourceStatusInd ::= SEQUENCE {
  communicationControlPortID          CommunicationControlPortID,
  resourceOperationalState             ResourceOperationalState,
  availabilityStatus                   AvailabilityStatus,
  iE-Extensions                        ProtocolExtensionContainer { { CCP-InformationItem-ResourceStatusInd-ExtIEs } }      OPTIONAL,
  ...
}

CCP-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Cell-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-ResourceStatusInd }}

Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Cell-InformationItem-ResourceStatusInd  CRITICALITY ignore  TYPE Cell-InformationItem-ResourceStatusInd  PRESENCE mandatory }
}

Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
  c-ID                                  C-ID,
  resourceOperationalState              ResourceOperationalState          OPTIONAL,
  availabilityStatus                    AvailabilityStatus                OPTIONAL,
  primary-SCH-Information                P-SCH-Information-ResourceStatusInd  OPTIONAL, --FDD only
  secondary-SCH-Information              S-SCH-Information-ResourceStatusInd  OPTIONAL, --FDD only
  primary-CPICH-Information              P-CPICH-Information-ResourceStatusInd  OPTIONAL, --FDD only
  secondary-CPICH-Information            S-CPICH-InformationList-ResourceStatusInd  OPTIONAL, --FDD only
  primary-CCPCH-Information              P-CCPCH-Information-ResourceStatusInd  OPTIONAL,
  bCH-Information                        BCH-Information-ResourceStatusInd     OPTIONAL,
  secondary-CCPCH-InformationList         S-CCPCH-InformationList-ResourceStatusInd  OPTIONAL,
  pCH-Information                        PCH-Information-ResourceStatusInd     OPTIONAL,
  pICH-Information                       PICH-Information-ResourceStatusInd     OPTIONAL,
  fACH-InformationList                   FACH-InformationList-ResourceStatusInd  OPTIONAL,
  pRACH-InformationList                  PRACH-InformationList-ResourceStatusInd  OPTIONAL,
  rACH-InformationList                   RACH-InformationList-ResourceStatusInd  OPTIONAL,
  aICH-InformationList                   AICH-InformationList-ResourceStatusInd  OPTIONAL, --FDD only
  pCPCH-InformationList                  PCPCH-InformationList-ResourceStatusInd  OPTIONAL, --FDD only
  cPCH-InformationList                   CPCH-InformationList-ResourceStatusInd  OPTIONAL, --FDD only
  aP-AICH-InformationList                AP-AICH-InformationList-ResourceStatusInd  OPTIONAL, --FDD only
  cDCA-ICH-InformationList               CDCA-ICH-InformationList-ResourceStatusInd  OPTIONAL, --FDD only
  SCH-Information                        SCH-Information-ResourceStatusInd     OPTIONAL, --3.84Mcps TDD only
  iE-Extensions                          ProtocolExtensionContainer { { Cell-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
  ...
}

Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

{ ID id-FPACH-LCR-InformationList-ResourceStatusInd PRESENCE optional }	CRITICALITY ignore	EXTENSION	FPACH-LCR-InformationList-ResourceStatusInd
{ ID id-DwPCH-LCR-Information-ResourceStatusInd PRESENCE optional }, -- for 1.28Mcps TDD only	CRITICALITY ignore	EXTENSION	DwPCH-LCR-Information-ResourceStatusInd

```

...
}

P-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-ResourceStatusInd }}

P-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-SCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-ResourceStatusInd }}

S-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-SCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CPICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-ResourceStatusInd }}

P-CPICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-CPICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-CPICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-ResourceStatusInd }}

S-CPICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-CPICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CCPCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-ResourceStatusInd }}

P-CCPCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

BCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ BCH-InformationIE-ResourceStatusInd }}

BCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-BCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

S-CCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-ResourceStatusInd }}

S-CCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

PCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PCH-InformationIE-ResourceStatusInd }}

```



```

PCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

PICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PICH-InformationIE-ResourceStatusInd }}

PICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

FACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-ResourceStatusInd }}

FACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

PRACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-ResourceStatusInd }}

PRACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

RACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-ResourceStatusInd }}

RACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-ResourceStatusInd }}

AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

PCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-ResourceStatusInd }}

PCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE optional }
}

CPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-ResourceStatusInd }}

CPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-CPCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE optional }
}

```

AP-AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-ResourceStatusInd }}

AP-AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
 { ID id-AP-AICH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE optional }
 }

CDCA-ICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-ResourceStatusInd }}

CDCA-ICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
 { ID id-CDCA-ICH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE optional }
 }

SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ SCH-InformationIE-ResourceStatusInd }}

SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
 { ID id-SCH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
 }

FPACH-LCR-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-ResourceStatusInd }}

FPACH-LCR-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
 { ID id-FPACH-LCR-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
 }

DwPCH-LCR-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ DwPCH-LCR-InformationIE-ResourceStatusInd }}

DwPCH-LCR-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
 { ID id-DwPCH-LCR-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
 }

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK SETUP REQUEST TDD
--
-- *****

RadioLinkSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY reject          TYPE          CRNC-CommunicationContextID
      PRESENCE mandatory }|
    { ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD          CRITICALITY notify          TYPE          UL-CCTrCH-InformationList-RL-
SetupRqstTDD          PRESENCE optional }|
    { ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD          CRITICALITY notify          TYPE          DL-CCTrCH-InformationList-RL-
SetupRqstTDD          PRESENCE optional }|
    { ID id-DCH-TDD-Information          CRITICALITY reject          TYPE          DCH-TDD-Information          PRESENCE optional }|
    { ID id-DSCH-TDD-Information          CRITICALITY reject          TYPE          DSCH-TDD-Information          PRESENCE optional }|
    { ID id-USCH-Information          CRITICALITY reject          TYPE          USCH-Information          PRESENCE optional }|
    { ID id-RL-Information-RL-SetupRqstTDD          CRITICALITY reject          TYPE          RL-Information-RL-SetupRqstTDD
      PRESENCE mandatory },
    ...
}

RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-TDD-Information          CRITICALITY reject          EXTENSION HSDSCH-TDD-Information          PRESENCE optional }|
    { ID id-HSDSCH-RNTI          CRITICALITY reject          EXTENSION HSDSCH-RNTI          PRESENCE optional }|
    { ID id-HSPDSCH-RL-ID          CRITICALITY reject          EXTENSION RL-ID          PRESENCE conditional },
    ...
}

UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
    ProtocolIE-Single-Container{{ UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD          CRITICALITY          notify          TYPE          UL-CCTrCH-InformationItem-RL-
SetupRqstTDD          PRESENCE mandatory}
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS          TFCS,
    tFCI-Coding          TFCI-Coding,
    punctureLimit          PunctureLimit,
    uL-DPCH-Information          UL-DPCH-Information-RL-SetupRqstTDD          OPTIONAL, -- For 3.84Mcps TDD only
    iE-Extensions          ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

    { ID id-UL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify      EXTENSION      UL-DPCH-LCR-Information-RL-SetupRqstTDD      PRESENCE optional
    } | -- For 1.28Mcps TDD only
    { ID id-UL-SIRTarget          CRITICALITY reject      EXTENSION      UL-SIR          PRESENCE optional      },
    -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
    ...
}

UL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationList-RL-SetupRqstTDD      CRITICALITY notify      TYPE UL-DPCH-InformationItem-RL-SetupRqstTDD      PRESENCE mandatory  }
}

UL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset           TDD-DPCHOffset,
    uL-Timeslot-Information   UL-Timeslot-Information,
    iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }      OPTIONAL,
    ...
}

UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD      CRITICALITY notify      TYPE UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD      PRESENCE
    optional      }
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset           TDD-DPCHOffset,
    uL-TimeslotLCR-Information   UL-TimeslotLCR-Information,
    iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs } }      OPTIONAL,
    ...
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container{{ DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD      CRITICALITY      notify      TYPE DL-CCTrCH-InformationItem-
    RL-SetupRqstTDD      PRESENCE      mandatory }
}

```

```

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    tFCS                     TFCS,
    tFCI-Coding              TFCI-Coding,
    punctureLimit            PunctureLimit,
    tdd-TPC-DownlinkStepSize TDD-TPC-DownlinkStepSize,
    cCTrCH-TPCList           CCTrCH-TPCList-RL-SetupRqstTDD OPTIONAL,
    dL-DPCH-Information      DL-DPCH-Information-RL-SetupRqstTDD OPTIONAL, -- For 3.84Mcps TDD only
    iE-Extensions            ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify EXTENSION DL-DPCH-LCR-Information-RL-SetupRqstTDD PRESENCE optional } | -- For 1.28Mcps TDD only
    { ID id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional },
    ...
}

CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD

CCTrCH-TPCItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-SetupRqstTDD PRESENCE mandatory }
}

DL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset            TDD-DPCHOffset,
    dL-Timeslot-Information    DL-Timeslot-Information,
    iE-Extensions            ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}

```

```

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD PRESENCE
  mandatory }
}

```

```

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  dL-TimeslotLCR-Information DL-TimeslotLCR-Information,
  tstdIndicator             TSTD-Indicator,
  iE-Extensions             ProtocolExtensionContainer { { DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

```

```

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
  rL-ID                     RL-ID,
  c-ID                      C-ID,
  frameOffset               FrameOffset,
  specialBurstScheduling    SpecialBurstScheduling,
  initialDL-transmissionPower DL-Power,
  maximumDL-power          DL-Power,
  minimumDL-power          DL-Power,
  dL-TimeSlotISCPInfo      DL-TimeSlotISCPInfo OPTIONAL, -- For 3.84Mcps TDD only
  iE-Extensions             ProtocolExtensionContainer { { RL-Information-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

```

```

RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD CRITICALITY reject EXTENSION DL-TimeSlotISCPInfoLCRTimeslotISCP-LCR-InfoList-RL-
  SetupRqstTDD PRESENCE optional } | -- For 1.28Mcps TDD only
  { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional } |
  { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional },
  ...
}

```

```

TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD ::= SEQUENCE {
  dL-TimeslotISCP-LCR-Info DL-TimeSlotISCPInfoLCR,
  iE-Extensions ProtocolExtensionContainer { {TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK ADDITION REQUEST TDD
--
-- *****

RadioLinkAdditionRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkAdditionRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkAdditionRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-NodeB-CommunicationContextID          CRITICALITY    reject          TYPE NodeB-
CommunicationContextID          PRESENCE    mandatory    }}
    { ID      id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD    CRITICALITY    reject          TYPE UL-CCTrCH-InformationList-
RL-AdditionRqstTDD          PRESENCE    optional    }|
    { ID      id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD    CRITICALITY    reject          TYPE DL-CCTrCH-InformationList-
RL-AdditionRqstTDD          PRESENCE    optional    }|
    { ID      id-RL-Information-RL-AdditionRqstTDD    CRITICALITY    reject          TYPE RL-Information-RL-
AdditionRqstTDD          PRESENCE    mandatory    },
    ...
}

RadioLinkAdditionRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-AdditionRqstTDD

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    uL-DPCH-Information          UL-DPCH-InformationList-RL-AdditionRqstTDD    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID      id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD          CRITICALITY    notify          EXTENSION    UL-DPCH-
InformationItem-LCR-RL-AdditionRqstTDD          PRESENCE    optional    }, -- For 1.28cps TDD only
    ...
    { ID      id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD          CRITICALITY    notify          EXTENSION    UL-DPCH-
InformationItem-LCR-RL-AdditionRqstTDD          PRESENCE    optional    }, -- For 1.28cps TDD only
    }
}

UL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}

UL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-UL-DPCH-InformationItem-RL-AdditionRqstTDD          CRITICALITY    notify          TYPE UL-DPCH-InformationItem-RL-
AdditionRqstTDD          PRESENCE    optional    } -- For 3.84Mcps TDD only
}

UL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {

```

```

    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    uL-Timeslot-Information UL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-AdditionRqstTDD

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID              CCTrCH-ID,
    dL-DPCH-Information    DL-DPCH-InformationList-RL-AdditionRqstTDD OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD CRITICALITY notify EXTENSION DL-DPCH-
InformationItem-LCR-RL-AdditionRqstTDD PRESENCE optional }| -- For 1.28Mcps TDD only
    { ID id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional },
    ...
}

DL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}

DL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationItem-RL-AdditionRqstTDD CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-
AdditionRqstTDD PRESENCE mandatory } -- For 3.84Mcps TDD only
}

DL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dL-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-AdditionRqstTDD ::= SEQUENCE {
    rL-ID                  RL-ID,
    c-ID                   C-ID,
    frameOffset            FrameOffset,
    diversityControlField  DiversityControlField,

```



```

initial-DL-Transmission-Power      DL-Power      OPTIONAL,
maximumDL-Power                    DL-Power      OPTIONAL,
minimumDL-Power                    DL-Power      OPTIONAL,
dL-TimeSlotISCPInfo                DL-TimeSlotISCPInfo OPTIONAL, -- For 3.84Mcps TDD only
iE-Extensions                       ProtocolExtensionContainer { { RL-information-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
...
}

RL-information-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeSlotISCP-InformationList-LCR-RL-AdditionRqstTDD CRITICALITY notifyreject EXTENSION DL-
TimeSlotISCPInfoLCRTIME SLOTISCP-InformationList-LCR-RL-AdditionRqstTDD PRESENCE optional }|
  { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional }|
  { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional },
  ...
}

UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  uL-TimeSlotLCR-Information UL-TimeSlotLCR-Information,
  iE-Extensions         ProtocolExtensionContainer { { UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  dL-TimeSlotLCR-Information DL-TimeSlotLCR-Information,
  iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TimeSlotISCP-InformationList-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
  dL-TimeSlotISCP-Info DL-TimeSlotISCPInfoLCR,
  iE-Extensions ProtocolExtensionContainer { {TimeSlotISCPInfoList-LCR-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

TimeSlotISCPInfoList-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE TDD
--
-- *****
```

```
RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationPrepareTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}}    OPTIONAL,
    ...
}
```

```
RadioLinkReconfigurationPrepareTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY reject TYPE NodeB-CommunicationContextID
      PRESENCE mandatory } |
    { ID id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD          CRITICALITY reject TYPE UL-CCTrCH-
      InformationAddList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD          CRITICALITY reject TYPE UL-CCTrCH-
      InformationModifyList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD          CRITICALITY reject TYPE UL-CCTrCH-
      InformationDeleteList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD          CRITICALITY reject TYPE DL-CCTrCH-
      InformationAddList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD          CRITICALITY reject TYPE DL-CCTrCH-
      InformationModifyList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD          CRITICALITY reject TYPE DL-CCTrCH-
      InformationDeleteList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-TDD-DCHs-to-Modify          CRITICALITY reject TYPE TDD-DCHs-to-Modify PRESENCE optional
      } |
    { ID id-DCHs-to-Add-TDD          CRITICALITY reject TYPE DCH-TDD-Information PRESENCE optional
      } |
    { ID id-DCH-DeleteList-RL-ReconfPrepTDD          CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepTDD
      PRESENCE optional } |
    { ID id-DSCH-Information-ModifyList-RL-ReconfPrepTDD          CRITICALITY reject TYPE DSCH-Information-ModifyList-RL-
      ReconfPrepTDD PRESENCE optional } |
    { ID id-DSCHs-to-Add-TDD          CRITICALITY reject TYPE DSCH-TDD-Information PRESENCE optional } |
    { ID id-DSCH-Information-DeleteList-RL-ReconfPrepTDD          CRITICALITY reject TYPE DSCH-Information-DeleteList-RL-
      ReconfPrepTDD PRESENCE optional } |
    { ID id-USCH-Information-ModifyList-RL-ReconfPrepTDD          CRITICALITY reject TYPE USCH-Information-ModifyList-RL-
      ReconfPrepTDD PRESENCE optional } |
    { ID id-USCH-Information-Add          CRITICALITY reject TYPE USCH-Information PRESENCE optional } |
    { ID id-USCH-Information-DeleteList-RL-ReconfPrepTDD          CRITICALITY reject TYPE USCH-Information-DeleteList-RL-
      ReconfPrepTDD PRESENCE optional } |
    { ID id-RL-Information-RL-ReconfPrepTDD          CRITICALITY reject TYPE RL-Information-RL-ReconfPrepTDD
      PRESENCE optional },
    ...
}
```

```
RadioLinkReconfigurationPrepareTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SignallingBearerRequestIndicator          CRITICALITY reject EXTENSION SignallingBearerRequestIndicator PRESENCE optional } |
    { ID id-HSDSCH-Information-to-Modify          CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify PRESENCE optional } |
    { ID id-HSDSCH-TDD-Information-to-Add          CRITICALITY reject EXTENSION HSDSCH-TDD-Information PRESENCE optional } |
}
```

```

    { ID id-HSDSCH-TDD-Information-to-Delete    CRITICALITY reject    EXTENSION HSDSCH-DeleteList-RL-ReconfPrepTDD    PRESENCE optional } |
    { ID id-HSDSCH-RNTI                        CRITICALITY reject    EXTENSION HSDSCH-RNTI                          PRESENCE optional } |
    { ID id-HSPDSCH-RL-ID                      CRITICALITY reject    EXTENSION RL-ID                                PRESENCE optional } ,
    ...
}

UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    tFCS                     TFCS,
    tFCI-Coding              TFCI-Coding,
    punctureLimit            PunctureLimit,
    ul-DPCH-InformationList  UL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
    ...
}

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD    CRITICALITY reject    EXTENSION UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional } | -- For 3-841.28Mcps TDD only
    { ID id-UL-SIRTarget    CRITICALITY reject    EXTENSION    UL-SIR    PRESENCE optional    },
    -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
    ...
}

UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}

UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD    CRITICALITY reject    TYPE UL-DPCH-InformationAddItem-RL-ReconfPrepTDD    PRESENCE
    mandatory }
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod        RepetitionPeriod,
    repetitionLength        RepetitionLength,
    tdd-DPCHOffset          TDD-DPCHOffset,
    uL-Timeslot-Information UL-Timeslot-Information,
    iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
    ...
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD }}

UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD    CRITICALITY reject    TYPE UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
    PRESENCE mandatory } -- For 1.28Mcps TDD only
}

```

```

UL-DPCH-LCR-InformationAddListItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset           TDD-DPCHOffset,
    uL-Timeslot-InformationLCR UL-TimeslotLCR-Information,
    iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    tFCS                     TFCs                                OPTIONAL,
    tFCI-Coding              TFCI-Coding                       OPTIONAL,
    punctureLimit            PunctureLimit                     OPTIONAL,
    ul-DPCH-InformationAddList UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD OPTIONAL,
    ul-DPCH-InformationModifyList UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
    ul-DPCH-InformationDeleteList UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-InformationModify-AddList CRITICALITY reject EXTENSION UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD PRESENCE optional } | -- For 1.28Mcps TDD only
    { ID id-UL-SIRTarget CRITICALITY reject EXTENSION UL-SIR PRESENCE optional },
    -- This IE shall be applicable for 1.28Mcps TDD only.
    ...
}

UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD PRESENCE mandatory }
}

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset           TDD-DPCHOffset,
    uL-Timeslot-Information   UL-Timeslot-Information,
    iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationModify-AddListIEs-RL-
ReconfPrepTDD }}

UL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-LCR-InformationModify-AddItem-RL-
ReconfPrepTDD PRESENCE mandatory }
}

UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-DPCHOffset           TDD-DPCHOffset,
    uL-Timeslot-InformationLCR  UL-TimeslotLCR-Information,
    iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD }}

UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD PRESENCE mandatory }
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod OPTIONAL,
    repetitionLength          RepetitionLength OPTIONAL,
    tdd-DPCHOffset           TDD-DPCHOffset OPTIONAL,
    uL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD  UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-TimeslotLCR-InformationModify-ModifyList-RL-
ReconfPrepTDD PRESENCE optional }, -- For 1.28Mcps TDD only
    ...
}

UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD -- For 3.84Mcps TDD only

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {

```

```

    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType    OPTIONAL,
    tFCI-Presence           TFCI-Presence                OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD           UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCode TDD-ChannelisationCode    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeslotLCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfPrepTDD -- For 1.28Mcps TDD only
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR            TimeSlotLCR,
    midambleShiftLCR      MidambleShiftLCR    OPTIONAL,
    tFCI-Presence          TFCI-Presence      OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLRCR      UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLRCR    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLRCR ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR-ExtIEs} }
    OPTIONAL,
    ...
}

```

```

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD }}

UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD    CRITICALITY reject          TYPE UL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID              CCTrCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID              CCTrCH-ID,
    tFCS                  TFCS,
    tFCI-Coding            TFCI-Coding,
    punctureLimit          PunctureLimit,
    cCTrCH-TPCList         CCTrCH-TPCAddList-RL-ReconfPrepTDD          OPTIONAL,
    dl-DPCH-InformationList DL-DPCH-InformationAddList-RL-ReconfPrepTDD  OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

```

```

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD CRITICALITY reject EXTENSION DL-DPCH-LCR-
InformationAddList-RL-ReconfPrepTDD PRESENCE optional } | -- For 1.28Mcps TDD only
  { ID id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional },
  ...
}

CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD -- For 3.84Mcps TDD only

CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID CCTrCH-ID,
  iE-Extensions ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
  ...
}

CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD } }

DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationAddItem-RL-ReconfPrepTDD PRESENCE
mandatory }
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-DPCHOffset TDD-DPCHOffset,
  dL-Timeslot-Information DL-Timeslot-Information,
  iE-Extensions ProtocolExtensionContainer { { DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
  ...
}

DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD } }

DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
PRESENCE mandatory } -- For 1.28Mcps TDD only
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-DPCHOffset TDD-DPCHOffset,
  dL-Timeslot-InformationLCR DL-TimeslotLCR-Information,
  iE-Extensions ProtocolExtensionContainer { { DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
  ...
}

```



```

}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    tFCS                      TFCS                                OPTIONAL,
    tFCI-Coding              TFCI-Coding                        OPTIONAL,
    punctureLimit            PunctureLimit                    OPTIONAL,
    cCTrCH-TPCList           CCTrCH-TPCModifyList-RL-ReconfPrepTDD  OPTIONAL,
    dl-DPCH-InformationAddList DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD
    dl-DPCH-InformationModifyList DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
    dl-DPCH-InformationDeleteList DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD  OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject EXTENSION DL-DPCH-LCR-InformationModify-
    AddList-RL-ReconfPrepTDD PRESENCE optional },
    ...
    { ID id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject EXTENSION DL-DPCH-LCR-InformationModify-
    AddList-RL-ReconfPrepTDD PRESENCE optional }
}

CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions           ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs } }  OPTIONAL,
    ...
}

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }} --
For 3.84Mcps TDD only

DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
    PRESENCE mandatory } -- For 1.28Mcps TDD only
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod        RepetitionPeriod,
    repetitionLength        RepetitionLength,
}

```

```

tdd-DPCHOffset          TDD-DPCHOffset,
DL-Timeslot-Information DL-Timeslot-Information,
IE-Extensions           ProtocolExtensionContainer { { DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
...
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD } }

DL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD PRESENCE mandatory }
}

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  DL-Timeslot-InformationLCR DL-TimeslotLCR-Information,
  IE-Extensions             ProtocolExtensionContainer { { DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD } }

DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD PRESENCE mandatory }
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod          OPTIONAL,
  repetitionLength          RepetitionLength          OPTIONAL,
  tdd-DPCHOffset            TDD-DPCHOffset            OPTIONAL,
  DL-Timeslot-InformationAddModify-ModifyList-RL-ReconfPrepTDD DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
  IE-Extensions             ProtocolExtensionContainer { { DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD CRITICALITY reject EXTENSION DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD PRESENCE optional },
  ...
}

```

```

}

DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
    tFCI-Presence            TFCI-Presence OPTIONAL,
    dL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                  DPCH-ID,
    tdd-ChannelisationCode   TDD-ChannelisationCode OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModify-ModifyItem-
RL-ReconfPrepTDD

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR            MidambleShiftLCR OPTIONAL,
    tFCI-Presence                TFCI-Presence OPTIONAL,
    dL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    ...
}

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD

DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                    DPCH-ID,

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```

    tdd-ChannelisationCodeLCR          TDD-ChannelisationCodeLCR          OPTIONAL,
    iE-Extensions                      ProtocolExtensionContainer { { DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD } }

DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD    CRITICALITY reject          TYPE DL-DPCH-InformationModify-DeleteListIE-RL-
    ReconfPrepTDD              PRESENCE mandatory }
}

DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                      DPCH-ID,
    iE-Extensions                ProtocolExtensionContainer { { DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID                  CCTrCH-ID,
    iE-Extensions                ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD

DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dCH-ID                      DCH-ID,
    iE-Extensions                ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }      OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
DSCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-ModifyItem-RL-ReconfPrepTDD
DSCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    cCTrCH-ID              CCTrCH-ID                OPTIONAL,
    transportFormatSet     TransportFormatSet     OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority  FrameHandlingPriority  OPTIONAL,
    toAWS                  ToAWS                OPTIONAL,
    toAWE                  ToAWE                OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}
DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID          CRITICALITY ignore     EXTENSION BindingID          PRESENCE          optional }|
    { ID id-transportlayeraddress CRITICALITY ignore     EXTENSION TransportLayerAddress PRESENCE          optional },
    ...
}
DSCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-DeleteItem-RL-ReconfPrepTDD
DSCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}
DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
USCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-ModifyItem-RL-ReconfPrepTDD
USCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    transportFormatSet     TransportFormatSet     OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    cCTrCH-ID              CCTrCH-ID                OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    iE-Extensions          ProtocolExtensionContainer { { USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}
USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID          CRITICALITY ignore     EXTENSION BindingID          PRESENCE          optional }|
    { ID id-transportlayeraddress CRITICALITY ignore     EXTENSION TransportLayerAddress PRESENCE          optional },
    ...
}
}

```

```

USCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-DeleteItem-RL-ReconfPrepTDD

USCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-ReconfPrepTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    maxDL-Power          DL-Power OPTIONAL,
    minDL-Power          DL-Power OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { RL-Information-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-InitDL-Power    CRITICALITY ignore    EXTENSION DL-Power    PRESENCE optional } |
    { ID id-RL-Specific-DCH-Info  CRITICALITY ignore    EXTENSION  RL-Specific-DCH-Info  PRESENCE optional },
    ...
}

HSDSCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-DeleteItem-RL-ReconfPrepTDD

HSDSCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    hsDSCH-MACdFlow-ID    HSDSCH-MACdFlow-ID,
    iE-Extensions          ProtocolExtensionContainer { { HSDSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

HSDSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- *****

RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY reject          TYPE NodeB-
CommunicationContextID          PRESENCE mandatory } |
    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE UL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD          PRESENCE optional } |
    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE UL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD          PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE DL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD          PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE DL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD          PRESENCE optional } |
    { ID id-TDD-DCHs-to-Modify          CRITICALITY reject          TYPE TDD-DCHs-to-Modify          PRESENCE optional } |
    { ID id-DCHs-to-Add-TDD          CRITICALITY reject          TYPE DCH-TDD-Information
PRESENCE optional } |
    { ID id-DCH-DeleteList-RL-ReconfRqstTDD          CRITICALITY reject          TYPE DCH-DeleteList-RL-
ReconfRqstTDD          PRESENCE optional } |
    { ID id-RL-Information-RL-ReconfRqstTDD          CRITICALITY rejectignore          TYPE RL-Information-RL-
ReconfRqstTDD          PRESENCE optional },
    ...
}

RadioLinkReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SignallingBearerRequestIndicator          CRITICALITY reject EXTENSION SignallingBearerRequestIndicator          PRESENCE optional },
    ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD          CRITICALITY notify          TYPE UL-CCTrCH-
InformationModifyItem-RL-ReconfRqstTDD          PRESENCE mandatory }
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCCTrCH-ID          CCTrCH-ID,
    tFCS          TFCS          OPTIONAL,
    punctureLimit          PunctureLimit          OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

```

```

}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD          CRITICALITY    notify                TYPE  UL-CCTrCH-
InformationDeleteItem-RL-ReconfRqstTDD          PRESENCE      mandatory}
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCtRch-ID                      CCTrCH-ID,
    iE-Extensions                    ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD          CRITICALITY    notify                TYPE  DL-CCTrCH-
InformationModifyItem-RL-ReconfRqstTDD          PRESENCE      mandatory}
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCtRch-ID                      CCTrCH-ID,
    tFCS                            TFCS            OPTIONAL,
    punctureLimit                    PunctureLimit  OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD          CRITICALITY    notify                TYPE  DL-CCTrCH-
InformationDeleteItem-RL-ReconfRqstTDD          PRESENCE      mandatory}
}

```



```

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD

DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-ReconfRqstTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    maxDL-Power          DL-Power          OPTIONAL,
    minDL-Power          DL-Power          OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

RL-InformationItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-Specific-DCH-Info          CRITICALITY ignore          EXTENSION  RL-Specific-DCH-Info          PRESENCE  optional },
    ...
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- DL POWER TIMESLOT CONTROL REQUEST TDD
--
-- *****

DL-PowerTimeslotControlRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{DL-PowerTimeslotControlRequest-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{DL-PowerTimeslotControlRequest-Extensions}}      OPTIONAL,
  ...
}

DL-PowerTimeslotControlRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID          CRITICALITY ignore          TYPE          NodeB-CommunicationContextID          PRESENCE mandatory
  } |
  { ID id-TimeslotISCPInfo          CRITICALITY ignore          TYPE          DL-TimeslotISCPInfo          PRESENCE optional }, -- Mandatory for 3.84Mcps TDD
  only
  ...
}

DL-PowerTimeslotControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD          CRITICALITY ignore          EXTENSION          DL-TimeslotISCPInfoLCRTimeslotISCPInfoList-LCR-DL-PC-RqstTDD          PRESENCE optional } | -- Applicable to 1.28Mcps TDD only
  { ID id-PrimCCPCH-RSCP-DL-PC-RqstTDD          CRITICALITY ignore          EXTENSION          PrimaryCCPCH-RSCP          PRESENCE optional },
  ...
}

TimeslotISCPInfoList-LCR-DL-PC-RqstTDD ::= SEQUENCE {
  dl-TimeslotISCP-Info          DL-TimeslotISCPInfoLCR,          Mandatory for 1.28Mcps TDD only
  ie-Extensions          ProtocolExtensionContainer { (TimeslotISCPInfoItem-LCR-DL-PC-RqstTDD-ExtIEs) }          OPTIONAL,
  ...
}

TimeslotISCPInfoItem-LCR-DL-PC-RqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- DEDICATED MEASUREMENT INITIATION RESPONSE
--
-- *****

DedicatedMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementInitiationResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DedicatedMeasurementInitiationResponse-Extensions}}    OPTIONAL,
    ...
}

DedicatedMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore TYPE CRNC-CommunicationContextID PRESENCE
    mandatory } |
    { ID id-MeasurementID                        CRITICALITY ignore TYPE MeasurementID PRESENCE
    mandatory } |
    { ID id-DedicatedMeasurementObjectType-DM-Rsp CRITICALITY ignore TYPE DedicatedMeasurementObjectType-DM-Rsp PRESENCE
    optional } |
    { ID id-CriticalityDiagnostics                CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE
    optional },
    ...
}

DedicatedMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
    rL                RL-DM-Rsp,
    rLS               RL-Set-DM-Rsp,
    all-RL            RL-DM-Rsp,
    all-RLS           RL-Set-DM-Rsp,
    ...
}

RL-DM-Rsp ::= SEQUENCE {
    rL-InformationList-DM-Rsp    RL-InformationList-DM-Rsp,
    iE-Extensions                ProtocolExtensionContainer { { RLItem-DM-Rsp-ExtIEs } }    OPTIONAL,
    ...
}

RLItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rsp }}

RL-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rsp CRITICALITY ignore TYPE RL-InformationItem-DM-Rsp PRESENCE mandatory }
}

RL-InformationItem-DM-Rsp ::= SEQUENCE {

```

```

rL-ID                RL-ID,
dPCH-ID              DPCH-ID          OPTIONAL,
dedicatedMeasurementValue DedicatedMeasurementValue,
cFN                  CFN              OPTIONAL,
iE-Extensions        ProtocolExtensionContainer { { RL-InformationItem-DM-Rsp-ExtIEs } } OPTIONAL,
...
}

RL-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-PUSCH-Info-DM-Rsp          CRITICALITY reject          EXTENSION  PUSCH-Info-DM-Rsp          PRESENCE optional},
  -- TDD only
  ...
}

PUSCH-Info-DM-Rsp ::= SEQUENCE (SIZE (0..maxNrOfPUSCHs)) OF PUSCH-ID

RL-Set-DM-Rsp ::= SEQUENCE {
  rL-Set-InformationList-DM-Rsp      RL-Set-InformationList-DM-Rsp,
  iE-Extensions                      ProtocolExtensionContainer { { RL-SetItem-DM-Rsp-ExtIEs } } OPTIONAL,
  ...
}

RL-SetItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rsp }}

RL-Set-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
  { ID id-RL-Set-InformationItem-DM-Rsp          CRITICALITY ignore          TYPE          RL-Set-InformationItem-DM-Rsp          PRESENCE mandatory}
}

RL-Set-InformationItem-DM-Rsp ::= SEQUENCE {
  rL-Set-ID                RL-Set-ID,
  dedicatedMeasurementValue DedicatedMeasurementValue,
  cFN                      CFN              OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rsp-ExtIEs } } OPTIONAL,
  ...
}

RL-Set-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****
```

```
PhysicalSharedChannelReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container {{PhysicalSharedChannelReconfigurationRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestTDD-Extensions}}    OPTIONAL,
    ...
}
```

```
PhysicalSharedChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY reject          TYPE C-ID
      PRESENCE mandatory } |
    { ID id-SFN          CRITICALITY reject          TYPE SFN
      PRESENCE optional } |
    { ID id-PDSCHSets-AddList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-AddList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PDSCHSets-ModifyList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-ModifyList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PDSCHSets-DeleteList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-DeleteList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PUSCHSets-AddList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-AddList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PUSCHSets-ModifyList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-ModifyList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PUSCHSets-DeleteList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-DeleteList-PSCH-ReconfRqst PRESENCE
      optional },
    ...
}
```

```
PhysicalSharedChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst CRITICALITY reject          EXTENSION HS-PDSCH-TDD-Information-PSCH-ReconfRqst
      PRESENCE optional } |
    { ID id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst CRITICALITY reject          EXTENSION Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
      PRESENCE optional } |
    { ID id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst CRITICALITY reject          EXTENSION Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
      PRESENCE optional } |
    { ID id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst CRITICALITY reject          EXTENSION Delete-From-HS-SCCH-Resource-Pool-PSCH-
ReconfRqst PRESENCE optional },
    ...
}
```

```
PDSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-AddItem-PSCH-ReconfRqst
```

```
PDSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID          PDSCHSet-ID,
    pDSCH-InformationList PDSCH-Information-AddList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer {{PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs}}    OPTIONAL,
    ...
}
```

```

PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  {ID id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
  PRESENCE optional}, -- Mandatory for 1.28Mcps TDD
  ...
}

PDSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-AddListIEs-PSCH-ReconfRqst }} -- Mandatory for
3.84Mcps TDD only

PDSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
  {ID id-PDSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE
  mandatory}
}

PDSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  dl-Timeslot-InformationAddList-PSCH-ReconfRqst DL-Timeslot-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions ProtocolExtensionContainer { {PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationAddItem-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlot TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType,
  tFCI-Presence TFCI-Presence,
  dl-Code-InformationAddList-PSCH-ReconfRqst DL-Code-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfUL-TSPDSCHs)) OF DL-Code-InformationAddItem-PSCH-ReconfRqst

DL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  pDSCH-ID PDSCH-ID,
  tdd-ChannelisationCode TDD-ChannelisationCode,
  iE-Extensions ProtocolExtensionContainer { { DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

}

~~PDSCH-AddInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst }} -- Mandatory for 1.28Meps-TDD-only~~

~~PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst-NBAP-PROTOCOL-IES ::= {
 {ID id PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
 PRESENCE optional}
 }~~

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
 repetitionPeriod RepetitionPeriod,
 repetitionLength RepetitionLength,
 tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
 dl-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
 iE-Extensions ProtocolExtensionContainer { {PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
 ...
 }

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 ...
 }

DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
 timeSlotLCR TimeSlotLCR,
 midambleShiftLCR MidambleShiftLCR,
 tFCI-Presence TFCI-Presence,
 dl-Code-InformationAddList-LCR-PSCH-ReconfRqst DL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
 iE-Extensions ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
 ...
 }

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 ...
 }

DL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfUL~~TSP~~SDSCHs)) OF DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst

DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
 pDSCH-ID PDSCH-ID,
 tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
 iE-Extensions ProtocolExtensionContainer { { DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
 ...
 }

DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 ...
 }

PDSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-ModifyItem-PSCH-ReconfRqst

```

PDSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID                PDSCHSet-ID,
    pDSCH-InformationList      PDSCH-Information-ModifyList-PSCH-ReconfRqst,
    iE-Extensions              ProtocolExtensionContainer { {PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst
    PRESENCE optional}, -- Mandatory for 1.28Mcps TDD only
    ...
}

PDSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}

PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE optional} -- Mandatory for 3.84Mcps TDD only
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod            RepetitionPeriod OPTIONAL,
    repetitionLength            RepetitionLength OPTIONAL,
    tdd-PhysicalChannelOffset   TDD-PhysicalChannelOffset OPTIONAL,
    dl-Timeslot-InformationModifyList-PSCH-ReconfRqst DL-Timeslot-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                    TimeSlot,
    midambleShiftAndBurstType   MidambleShiftAndBurstType OPTIONAL,
    tFCI-Presence                TFCI-Presence OPTIONAL,
    dl-Code-InformationModifyList-PSCH-ReconfRqst DL-Code-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                    PDSCH-ID,
    tdd-ChannelisationCode      TDD-ChannelisationCode,

```



```

    iE-Extensions                ProtocolExtensionContainer { { DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst-NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-ModifyInformation-LCR-
ModifyItem-PSCH-ReconfRqst PRESENCE mandatory}
}

PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                RepetitionPeriod                OPTIONAL,
    repetitionLength                RepetitionLength                OPTIONAL,
    tdd-PhysicalChannelOffset        TDD-PhysicalChannelOffset    OPTIONAL,
    dl-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst            DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { {PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    ...
}

PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                    TimeSlotLCR,
    midambleShiftLCR                MidambleShiftLCR    OPTIONAL,
    tFCI-Presence                    TFCI-Presence    OPTIONAL,
    dl-Code-LCR-InformationModifyList-PSCH-ReconfRqst            DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }
    OPTIONAL,
    ...
}

DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                        PDSCH-ID,
    tdd-ChannelisationCodeLCR        TDD-ChannelisationCodeLCR,
    iE-Extensions                    ProtocolExtensionContainer { { DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
PDSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-DeleteItem-PSCH-ReconfRqst

PDSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID          PDSCHSet-ID,
    iE-Extensions       ProtocolExtensionContainer { {PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-AddItem-PSCH-ReconfRqst

PUSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID          PUSCHSet-ID,
    pUSCH-InformationList PUSCH-Information-AddList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { {PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
    PRESENCE optional}, -- Mandatory for 1.28Mcps TDD only
    ...
}

PUSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-AddListIEs-PSCH-ReconfRqst }} -- Mandatory for
3.84Mcps TDD only

PUSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE
    mandatory}
}

PUSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-PSCH-ReconfRqst UL-Timeslot-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions       ProtocolExtensionContainer { {PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-PSCH-ReconfRqst

```

```

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tFCI-Presence           TFCI-Presence,
    uL-Code-InformationAddList-PSCH-ReconfRqst UL-Code-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions           ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationAddItem-PSCH-ReconfRqst

UL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions           ProtocolExtensionContainer { { UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCH-AddInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PUSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst } }

PUSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    { ID id PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
    PRESENCE optional }
}

PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod        RepetitionPeriod,
    repetitionLength        RepetitionLength,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions           ProtocolExtensionContainer { { PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst

UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR            TimeSlotLCR,
    midambleShiftLCR       MidambleShiftLCR,
    tFCI-Presence          TFCI-Presence,
    uL-Code-InformationAddList-LCR-PSCH-ReconfRqst UL-Code-InformationAddList-LCR-PSCH-ReconfRqst,

```

```

    iE-Extensions          ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfUL-TSPUSCHs)) OF UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst

UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    iE-Extensions          ProtocolExtensionContainer { { UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-ModifyItem-PSCH-ReconfRqst

PUSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID            PUSCHSet-ID,
    pUSCH-InformationList  PUSCH-Information-ModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst
    PRESENCE optional}, -- For 1.28Mcps TDD only
    ...
}

PUSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst }} -- For 3.84Mcps
TDD only

PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE mandatory}
}

PUSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod OPTIONAL,
    repetitionLength      RepetitionLength OPTIONAL,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
    uL-Timeslot-InformationModifyList-PSCH-ReconfRqst UL-Timeslot-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

```

```

PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
    tFCI-Presence           TFCI-Presence OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst UL-Code-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions          ProtocolExtensionContainer { { UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRqst } }

PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    { ID id PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-ModifyInformation-LCR-
ModifyItem-PSCH-ReconfRqst PRESENCE optional }
}

PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod        RepetitionPeriod OPTIONAL,
    repetitionLength        RepetitionLength OPTIONAL,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
    uL-Timeslot-InformationModifyList-LCR-PSCH-ReconfRqst UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR    OPTIONAL,
    tFCI-Presence               TFCI-Presence      OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst  UL-Code-InformationModifyList-PSCH-ReconfRqst  OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }
    OPTIONAL,
    ...
}

UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                    PUSCH-ID,
    tdd-ChannelisationCodeLCR   TDD-ChannelisationCodeLCR,
    iE-Extensions               ProtocolExtensionContainer { { UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }
    OPTIONAL,
    ...
}

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-DeleteItem-PSCH-ReconfRqst

PUSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID                 PUSCHSet-ID,
    iE-Extensions               ProtocolExtensionContainer { { PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs } }
    OPTIONAL,
    ...
}

PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-PDSCH-TDD-Information-PSCH-ReconfRqst ::= SEQUENCE {
    dL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst  DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst  OPTIONAL,
    dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst  DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst  OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { { HS-PDSCH-TDD-Information-PSCH-ReconfRqst-ExtIEs } }
    OPTIONAL,
    ...
}

HS-PDSCH-TDD-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSSs)) OF DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst

```

```
DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    iE-Extensions           ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst-ExtIEs } }
    OPTIONAL,
    ...
}
```

```
DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst
```

```
DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlotLCR,
    midambleShiftAndBurstType MidambleShiftLCR,
    iE-Extensions           ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs } }
    OPTIONAL,
    ...
}
```

```
DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-Information-PSCH-ReconfRqst    HS-SCCH-Information-PSCH-ReconfRqst    OPTIONAL,
    hS-SCCH-Information-LCR-PSCH-ReconfRqst HS-SCCH-Information-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { { Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}
```

```
Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
HS-SCCH-Information-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-PSCH-ReconfRqst
```

```
HS-SCCH-InformationItem-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                HS-SCCH-ID,
    timeSlot                  TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tdd-ChannelisationCode    TDD-ChannelisationCode,
    hS-SCCH-MaxPower          DL-Power,
    hS-SICH-Information        HS-SICH-Information-PSCH-ReconfRqst,
    iE-Extensions             ProtocolExtensionContainer { { HS-SCCH-InformationItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}
```

```
HS-SCCH-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```

}
...
}
HS-SICH-Information-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions           ProtocolExtensionContainer { { HS-SICH-Information-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}
HS-SICH-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
HS-SCCH-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst
HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID              HS-SCCH-ID,
    timeSlotLCR             TimeSlotLCR,
    midambleShiftLCR        MidambleShiftLCR,
    tdd-ChannelisationCode  TDD-ChannelisationCodeLCR,
    hS-SCCH-MaxPower        DL-Power,
    hS-SICH-Information-LCR HS-SICH-Information-LCR-PSCH-ReconfRqst,
    iE-Extensions           ProtocolExtensionContainer { { HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}
HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
HS-SICH-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR             TimeSlotLCR,
    midambleShiftLCR        MidambleShiftLCR,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    iE-Extensions           ProtocolExtensionContainer { { HS-SICH-Information-LCR-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}
HS-SICH-Information-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-InformationModify-PSCH-ReconfRqst HS-SCCH-InformationModify-PSCH-ReconfRqst OPTIONAL,
    hS-SCCH-InformationModify-LCR-PSCH-ReconfRqst HS-SCCH-InformationModify-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions                               ProtocolExtensionContainer { { Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}
Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```



```

}
...
}
HS-SCCH-InformationModify-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-PSCH-ReconfRqst
HS-SCCH-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                HS-SCCH-ID,
    timeSlot                  TimeSlot OPTIONAL,
    midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
    tdd-ChannelisationCode    TDD-ChannelisationCode OPTIONAL,
    hS-SCCH-MaxPower          DL-Power OPTIONAL,
    hS-SICH-Information       HS-SICH-Information-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}
HS-SCCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
HS-SICH-InformationModify-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                  TimeSlot OPTIONAL,
    midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
    tdd-ChannelisationCode    TDD-ChannelisationCode OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { HS-SICH-InformationModify-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}
HS-SICH-InformationModify-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
HS-SCCH-InformationModify-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst
HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                HS-SCCH-ID,
    timeSlotLCR               TimeSlotLCR OPTIONAL,
    midambleShiftLCR          MidambleShiftLCR OPTIONAL,
    tdd-ChannelisationCode    TDD-ChannelisationCodeLCR OPTIONAL,
    hS-SCCH-MaxPower          DL-Power OPTIONAL,
    hS-SICH-Information-LCR   HS-SICH-Information-LCR-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}
HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
HS-SICH-InformationModify-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR               TimeSlotLCR OPTIONAL,
    midambleShiftLCR          MidambleShiftLCR OPTIONAL,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR OPTIONAL,

```

```
iE-Extensions          ProtocolExtensionContainer { { HS-SICH-InformationModify-LCR-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
...
}

HS-SICH-InformationModify-LCR-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}

Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst

Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst ::= SEQUENCE {
  hS-SCCH-ID          HS-SCCH-ID,
  iE-Extensions      ProtocolExtensionContainer { { Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs} }
  OPTIONAL,
  ...
}

Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}
```

9.3.4 Information Elements Definitions

```
--*****
--
-- Information Element Definitions
--
--*****
```

```
NBAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-IEs (2) }
```

```
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
```

UNCHANGED TEXT IS REMOVED

```
-- =====
-- C
-- =====
```

UNCHANGED TEXT IS REMOVED

```
CellParameterID ::= INTEGER (0..127,...)
```

```
CellSyncBurstAvailabilityIndicator ::= ENUMERATED {
— cellSyncBurstAvailable,
— cellSyncBurstNotAvailable
}
```

```
CellSyncBurstCode ::= INTEGER(0..7, ...)
```

UNCHANGED TEXT IS REMOVED

```
-- =====  
-- I  
-- =====
```

UNCHANGED TEXT IS REMOVED

```
IPDL-Indicator ::= ENUMERATED {  
    active,  
    inactive  
}
```

```
IPDL-FDD-Parameters ::= SEQUENCE {  
    iP-SpacingFDD          ENUMERATED{sp5, sp7, sp10, sp15, sp20, sp30, sp40, sp50, ...},  
    iP-Length              ENUMERATED{len5, len10},  
    seed                   INTEGER(±0..63),  
    burstModeParams        BurstModeParams OPTIONAL,  
    iE-Extensions          ProtocolExtensionContainer { { IPDLFDDParameter-ExtIEs } } OPTIONAL,  
    ...  
}
```

```
IPDLFDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {  
    ...  
}
```

UNCHANGED TEXT IS REMOVED

```
-- =====
-- T
-- =====
```

UNCHANGED TEXT IS REMOVED

```
TDD-ChannelisationCode ::= ENUMERATED {
  chCode1div1,
  chCode2div1,
  chCode2div2,
  chCode4div1,
  chCode4div2,
  chCode4div3,
  chCode4div4,
  chCode8div1,
  chCode8div2,
  chCode8div3,
  chCode8div4,
  chCode8div5,
  chCode8div6,
  chCode8div7,
  chCode8div8,
  chCode16div1,
  chCode16div2,
  chCode16div3,
  chCode16div4,
  chCode16div5,
  chCode16div6,
  chCode16div7,
  chCode16div8,
  chCode16div9,
  chCode16div10,
  chCode16div11,
  chCode16div12,
  chCode16div13,
  chCode16div14,
  chCode16div15,
  chCode16div16,
  ...
}

TDD-ChannelisationCodeLCR ::= SEQUENCE {
  tDD-ChannelisationCode      TDD-ChannelisationCode,
  modulation                  Modulation, -- Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD
  iE-Extensions               ProtocolExtensionContainer { { TDD-ChannelisationCodeLCR-ExtIEs } } OPTIONAL,
  ...
}

TDD-ChannelisationCodeLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

TDD-DL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem

UNCHANGED TEXT IS REMOVED

9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****

NBAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Constants (4)}

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

UNCHANGED TEXT IS REMOVED

-- *****
--
-- IEs
--
-- *****

id-AICH-Information                               ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd         ProtocolIE-ID ::= 1
id-BCH-Information                               ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd         ProtocolIE-ID ::= 8
id-BCCH-ModificationTime                       ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator                    ProtocolIE-ID ::= 10
id-Cause                                        ProtocolIE-ID ::= 13
id-CCP-InformationItem-AuditRsp                ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp               ProtocolIE-ID ::= 15
id-CCP-InformationItem-ResourceStatusInd       ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp              ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd      ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp              ProtocolIE-ID ::= 19
id-CellParameterID                            ProtocolIE-ID ::= 23
id-CFN                                         ProtocolIE-ID ::= 24
id-C-ID                                        ProtocolIE-ID ::= 25
id-CommonMeasurementAccuracy                  ProtocolIE-ID ::= 39
id-CommonMeasurementObjectType-CM-Rprt        ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst       ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp        ProtocolIE-ID ::= 33
id-CommonMeasurementType                     ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID                   ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD ProtocolIE-ID ::= 37
id-CommunicationControlPortID                ProtocolIE-ID ::= 40
id-ConfigurationGenerationID                 ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID               ProtocolIE-ID ::= 44

```

id-CriticalityDiagnostics	ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD	ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD	ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 54
id-DCH-DeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 55
id-DCH-FDD-Information	ProtocolIE-ID ::= 56
id-DCH-TDD-Information	ProtocolIE-ID ::= 57
id-DCH-InformationResponse	ProtocolIE-ID ::= 59
id-FDD-DCHs-to-Modify	ProtocolIE-ID ::= 62
id-TDD-DCHs-to-Modify	ProtocolIE-ID ::= 63
id-DCH-ModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 65
id-DCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 135
id-DedicatedMeasurementObjectType-DM-Rprt	ProtocolIE-ID ::= 67
id-DedicatedMeasurementObjectType-DM-Rqst	ProtocolIE-ID ::= 68
id-DedicatedMeasurementObjectType-DM-Rsp	ProtocolIE-ID ::= 69
id-DedicatedMeasurementType	ProtocolIE-ID ::= 70
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 72
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 73
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 76
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 79
id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 83
id-DL-DPCH-TimingAdjustment	ProtocolIE-ID ::= 21
id-DL-ReferencePowerInformationItem-DL-PC-Rqst	ProtocolIE-ID ::= 84
id-DLReferencePower	ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 86
id-DSCH-AddItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 87
id-DSCHs-to-Add-FDD	ProtocolIE-ID ::= 89
id-DSCH-DeleteItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 91
id-DSCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 100
id-DSCH-InformationResponse	ProtocolIE-ID ::= 105
id-DSCH-FDD-Information	ProtocolIE-ID ::= 106
id-DSCH-TDD-Information	ProtocolIE-ID ::= 107
id-DSCH-ModifyItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 108
id-DSCH-ModifyList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 112
id-DSCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 136
id-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 113
id-FACH-Information	ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd	ProtocolIE-ID ::= 123
id-Local-Cell-ID	ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 2

id-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 128
id-AdjustmentPeriod	ProtocolIE-ID ::= 129
id-MaxAdjustmentStep	ProtocolIE-ID ::= 130
id-MaximumTransmissionPower	ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 132
id-MeasurementID	ProtocolIE-ID ::= 133
id-MessageStructure	ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst	ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID	ProtocolIE-ID ::= 143
id-NeighbouringCellMeasurementInformation	ProtocolIE-ID ::= 455
id-P-CCPCH-Information	ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 145
id-P-CPICH-Information	ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 147
id-P-SCH-Information	ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 150
id-PCPCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 156
id-PCH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 157
id-PCH-Information	ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 165
id-PICH-Information	ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 168
id-PowerAdjustmentType	ProtocolIE-ID ::= 169
id-PRACH-Information	ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 176
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 189
id-RACH-Information	ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 197

id-ReportCharacteristics	ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD	ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRqst	ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRqstFDD	ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRqstFDD	ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRqst	ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 214
id-RL-InformationList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 215
id-RL-InformationList-RL-SetupRqstFDD	ProtocolIE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady	ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-ReconfRsp	ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 221
id-RL-InformationResponseList-RL-ReconfReady	ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-ReconfRsp	ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 225
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 228
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 229
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure	ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 241
id-RL-Set-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 242
id-S-CCPCH-Information	ProtocolIE-ID ::= 247
id-S-CPICH-Information	ProtocolIE-ID ::= 249
id-SCH-Information	ProtocolIE-ID ::= 251
id-S-SCH-Information	ProtocolIE-ID ::= 253
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD	ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD	ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 264
id-SecondarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate	ProtocolIE-ID ::= 266

id-SFN	ProtocolIE-ID ::= 268
id-SignallingBearerRequestIndicator	ProtocolIE-ID ::= 138
id-ShutdownTimer	ProtocolIE-ID ::= 269
id-Start-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 114
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 270
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 271
id-SyncCase	ProtocolIE-ID ::= 274
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH	ProtocolIE-ID ::= 275
id-T-Cell	ProtocolIE-ID ::= 276
id-TargetCommunicationControlPortID	ProtocolIE-ID ::= 139
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 277
id-TimeSlotConfigurationList-Cell-SetupRqstTDD	ProtocolIE-ID ::= 278
id-TransmissionDiversityApplied	ProtocolIE-ID ::= 279
id-TypeOfError	ProtocolIE-ID ::= 508
id-UARFCNforNt	ProtocolIE-ID ::= 280
id-UARFCNforNd	ProtocolIE-ID ::= 281
id-UARFCNforNu	ProtocolIE-ID ::= 282
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 284
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 285
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 288
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 289
id-UL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 291
id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 293
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 294
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 295
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 296
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 297
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD	ProtocolIE-ID ::= 300
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD	ProtocolIE-ID ::= 301
id-USCH-Information-Add	ProtocolIE-ID ::= 302
id-USCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 304
id-USCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 306
id-USCH-InformationResponse	ProtocolIE-ID ::= 309
id-USCH-Information	ProtocolIE-ID ::= 310
id-USCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 141
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 315
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 316
id-AdjustmentRatio	ProtocolIE-ID ::= 317
id-AP-AICH-Information	ProtocolIE-ID ::= 320
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 323
id-CauseLevel-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 324
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 329
id-CDCA-ICH-Information	ProtocolIE-ID ::= 330
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode	ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag	ProtocolIE-ID ::= 335
id-CPCH-Information	ProtocolIE-ID ::= 336

id-CPCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 342
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count	ProtocolIE-ID ::= 358
id-DPC-Mode	ProtocolIE-ID ::= 450
id-DPCHConstant	ProtocolIE-ID ::= 359
id-DSCH-FDD-Common-Information	ProtocolIE-ID ::= 94
id-EnhancedDSCHPC	ProtocolIE-ID ::= 110
id-EnhancedDSCHPCIndicator	ProtocolIE-ID ::= 111
id-FACH-ParametersList-CTCH-SetupRsp	ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 375
id-PCPCH-Information	ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 380
id-PRACHConstant	ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 383
id-PUSCHConstant	ProtocolIE-ID ::= 384
id-RACH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 385
id-SSDT-CellIDforEDSCHPC	ProtocolIE-ID ::= 443
id-Synchronisation-Configuration-Cell-ReconfRqst	ProtocolIE-ID ::= 393
id-Synchronisation-Configuration-Cell-SetupRqst	ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 398
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 403
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 407
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 408
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 409
id-CommunicationContextInfoItem-Reset	ProtocolIE-ID ::= 412
id-CommunicationControlPortInfoItem-Reset	ProtocolIE-ID ::= 414
id-ResetIndicator	ProtocolIE-ID ::= 416
id-TFCI2-Bearer-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 417
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD	ProtocolIE-ID ::= 418
id-TFCI2-BearerInformationResponse	ProtocolIE-ID ::= 419
id-TFCI2BearerRequestIndicator	ProtocolIE-ID ::= 142

id-TimingAdvanceApplied	ProtocolIE-ID ::= 287
id-CFNReportingIndicator	ProtocolIE-ID ::= 6
id-SFNReportingIndicator	ProtocolIE-ID ::= 11
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 12
id-TimeslotISCPInfo	ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 47
id-CauseLevel-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 420
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 421
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD	ProtocolIE-ID ::= 494
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 482
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 422
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 423
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 424
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 425
id-CellSyncBurstTransInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 426
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 427
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 428
id-CellSyncInfo-CellSyncReprtTDD	ProtocolIE-ID ::= 429
id-CSBTransmissionID	ProtocolIE-ID ::= 430
id-CSBMeasurementID	ProtocolIE-ID ::= 431
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 432
id-NCyclesPerSFNperiod	ProtocolIE-ID ::= 433
id-NRepetitionsPerCyclePeriod	ProtocolIE-ID ::= 434
id-SyncFrameNumber	ProtocolIE-ID ::= 437
id-SynchronisationReportType	ProtocolIE-ID ::= 438
id-SynchronisationReportCharacteristics	ProtocolIE-ID ::= 439
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 440
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 119
id-ReferenceClockAvailability	ProtocolIE-ID ::= 435
id-ReferenceSFNoffset	ProtocolIE-ID ::= 436
id-InformationExchangeID	ProtocolIE-ID ::= 444
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 445
id-InformationType	ProtocolIE-ID ::= 446
id-InformationReportCharacteristics	ProtocolIE-ID ::= 447
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 448
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 449
id-IPDLParameter-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 451
id-IPDLParameter-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 452
id-IPDLParameter-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 453
id-IPDLParameter-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 454
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 74
id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 75
id-DwPCH-LCR-Information	ProtocolIE-ID ::= 78
id-DwPCH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 80
id-DwPCH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 90
id-DwPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 97
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 99
id-DwPCH-LCR-Information-ResourceStatusInd	ProtocolIE-ID ::= 101
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 154
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 174

id-FPACH-LCR-Information	ProtocolIE-ID ::= 290
id-FPACH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 292
id-FPACH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 22
id-FPACH-LCR-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 311
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 312
id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 313
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 314
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 456
id-PCH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 457
id-PCH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 458
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 459
id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 460
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 461
id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 462
id-RL-InformationResponse-LCR-RL-SetupRspTDD	ProtocolIE-ID ::= 463
id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 464
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 465
id-TimeSlot	ProtocolIE-ID ::= 495
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 466
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 467
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD	ProtocolIE-ID ::= 468
id-TimeSlotLCR-CM-Rqst	ProtocolIE-ID ::= 469
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 470
id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 471
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 472
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 473
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 474
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 475
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 476
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 477
id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 478
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 479
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD	ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationModify-AddList	ProtocolIE-ID ::= 483
id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 484
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 485
id-UL-SIRTarget	ProtocolIE-ID ::= 510
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 486
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 487
id-PDSCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 26
id-PDSCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 27
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 488
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 489
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 490
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 491
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 493
id-timeslotInfo-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 496
id-SyncReportType-CellSyncReprtTDD	ProtocolIE-ID ::= 497
id-Power-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 498
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 499
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 500

id-Power-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 501
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 502
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd	ProtocolIE-ID ::= 503
id-Power-Local-Cell-Group-ID	ProtocolIE-ID ::= 504
id-PUSCH-Info-DM-Rqst	ProtocolIE-ID ::= 505
id-PUSCH-Info-DM-Rsp	ProtocolIE-ID ::= 506
id-PUSCH-Info-DM-Rprt	ProtocolIE-ID ::= 507
id-InitDL-Power	ProtocolIE-ID ::= 509
id-cellSyncBurstRepetitionPeriod	ProtocolIE-ID ::= 511
id-ReportCharacteristicsType-OnModification	ProtocolIE-ID ::= 512
id-SFNFSNMeasurementValueInformation	ProtocolIE-ID ::= 513
id-SFNFSNMeasurementThresholdInformation	ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation	ProtocolIE-ID ::= 515
id-TUTRANGPSMeasurementThresholdInformation	ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 520
id-RL-InformationResponse-LCR-RL-AdditionRspTDD	ProtocolIE-ID ::= 51
id-DL-PowerBalancing-Information	ProtocolIE-ID ::= 28
id-DL-PowerBalancing-ActivationIndicator	ProtocolIE-ID ::= 29
id-DL-PowerBalancing-UpdatedIndicator	ProtocolIE-ID ::= 30
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD	ProtocolIE-ID ::= 517
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD	ProtocolIE-ID ::= 518
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD	ProtocolIE-ID ::= 519
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 41
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 42
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst	ProtocolIE-ID ::= 522
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst	ProtocolIE-ID ::= 523
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 524
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 525
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 526
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 527
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 528
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 529
id-bindingID	ProtocolIE-ID ::= xxx
id-RL-Specific-DCH-Info	ProtocolIE-ID ::= xxx
id-transportlayeraddress	ProtocolIE-ID ::= xxx
id-DelayedActivation	ProtocolIE-ID ::= 231
id-DelayedActivationList-RL-ActivationCmdFDD	ProtocolIE-ID ::= 232
id-DelayedActivationInformation-RL-ActivationCmdFDD	ProtocolIE-ID ::= 233
id-DelayedActivationList-RL-ActivationCmdTDD	ProtocolIE-ID ::= 234
id-DelayedActivationInformation-RL-ActivationCmdTDD	ProtocolIE-ID ::= 235
id-neighbouringTDDCellMeasurementInformationLCR	ProtocolIE-ID ::= 58
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 543
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 544
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 545
id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 546
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 547
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD	ProtocolIE-ID ::= 548
id-SyncDLCodeIdThreInfoLCR	ProtocolIE-ID ::= 549
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 550
id-DwPCH-Power	ProtocolIE-ID ::= 551
id-Angle-Of-Arrival-Value-LCR	ProtocolIE-ID ::= 521
id-HSDSCH-FDD-Information	ProtocolIE-ID ::= 530
id-HSDSCH-FDD-Information-Response	ProtocolIE-ID ::= 531

id-HSDSCH-FDD-Information-to-Add
id-HSDSCH-FDD-Information-to-Delete
id-HSDSCH-Information-to-Modify
id-HSDSCH-RNTI
id-HSDSCH-TDD-Information
id-HSDSCH-TDD-Information-Response
id-HSDSCH-TDD-Information-Response-LCR
id-HSDSCH-TDD-Information-to-Add
id-HSDSCH-TDD-Information-to-Delete
id-HSPDSCH-RL-ID
id-PrimCCPCH-RSCP-DL-PC-RqstTDD

ProtocolIE-ID ::= 532
ProtocolIE-ID ::= 533
ProtocolIE-ID ::= 534
ProtocolIE-ID ::= 535
ProtocolIE-ID ::= 536
ProtocolIE-ID ::= 537
ProtocolIE-ID ::= 538
ProtocolIE-ID ::= 539
ProtocolIE-ID ::= 540
ProtocolIE-ID ::= 541
ProtocolIE-ID ::= 542

END

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Clarification for the usage of the cause value	
Source:	⌘ R-WG3	
Work item code:	⌘ TEI	Date: ⌘ 2002-May
Category:	⌘ F	Release: ⌘ R99
	Use <u>one</u> of the following categories:	Use <u>one</u> of the following releases:
	F (correction)	2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)	R96 (Release 1996)
	B (addition of feature),	R97 (Release 1997)
	C (functional modification of feature)	R98 (Release 1998)
	D (editorial modification)	R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .	REL-4 (Release 4)
		REL-5 (Release 5)

Reason for change: ⌘ The cause value, “Abstract Syntax Error (Ignore and Notify)”, should not be set to the Cause IE. Please see R3-020971.

In case of abstract syntax error occurs in the IE which has the criticality of Ignore and Notify, the procedure shall be continue as if that error IE is not present and report in the response message(for class 1), or in Errir Indication (for class 2) that the error IE has been ignored.

However, in the above case, if the receiver further detect an error e.g. sementic error which should terminate the procedure, it is not clear what cause value(either Abstract Syntax Error (Ignore and Notify) or Sementic Error) shall be set in the failure message(for class 1) or Error ndication (for class 2).

Summary of change: ⌘ Rev.1

Impact Analysis statement was corrected.

Rev.0

It was clarified that if an error that terminates a procedure occurs, the returned cause value shall reflect the error that caused the termination of the procedure even if one or more abstract syntax errors with criticality “ignore and notify” have earlier occurred within the same procedure.

Consequences if not approved: ⌘ If this CR is not approved, unsuitable cause value might be set to the Cause IE.

Impact Analysis:

Impact assessment towards the previous version of the specification (same release):

		CR098 on TS25.419v3.8.0
		CR099 on TS25.419v4.4.0
		CR100 on TS25.419v5.0.0
		CR654 on TS25.423v3.9.0
		CR655 on TS25.423v4.4.0
		CR656 on TS25.423v5.0.0
		CR685 on TS25.433v4.4.0
		CR686 on TS25.433v5.0.0
		CR018 on TS25.453v5.3.0
affected:	<input type="checkbox"/>	Test specifications
	<input type="checkbox"/>	O&M Specifications
Other comments:	⌘	

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at:
http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/>. For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

10.5 Exceptions

The error handling for all the cases described hereafter shall take precedence over any other error handling described in the other subclauses of clause 10.

- If any type of error (Transfer Syntax Error, Abstract Syntax Error or Logical Error) is detected in the ERROR INDICATION message, it shall not trigger the Error Indication procedure in the receiving Node but local error handling.
- In case a response message, failure message or ERROR INDICATION message needs to be returned, but the information necessary to determine the receiver of that message is missing, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.
- If an error that terminates a procedure occurs, the returned cause value shall reflect the error that caused the termination of the procedure even if one or more abstract syntax errors with criticality “ignore and notify” have earlier occurred within the same procedure.

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Clarification for the usage of the cause value	
Source:	⌘ R-WG3	
Work item code:	⌘ TEI	Date: ⌘ 2002-May
Category:	⌘ A	Release: ⌘ REL-4
	Use <u>one</u> of the following categories:	Use <u>one</u> of the following releases:
	F (correction)	2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)	R96 (Release 1996)
	B (addition of feature),	R97 (Release 1997)
	C (functional modification of feature)	R98 (Release 1998)
	D (editorial modification)	R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .	REL-4 (Release 4)
		REL-5 (Release 5)

Reason for change: ⌘ The cause value, “Abstract Syntax Error (Ignore and Notify)”, should not be set to the Cause IE. Please see R3-020971.

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Consequences if not approved: ⌘ If this CR is not approved, unsuitable cause value might be set to the Cause IE.

Impact Analysis:

Impact assessment towards the previous version of the specification (same release):

affected:	<input type="checkbox"/>	Test specifications	CR098 on TS25.419v3.8.0 CR099 on TS25.419v4.4.0 CR100 on TS25.419v5.0.0 CR654 on TS25.423v3.9.0 CR655 on TS25.423v4.4.0 CR656 on TS25.423v5.0.0 CR684 on TS25.433v3.9.0 CR686 on TS25.433v5.0.0 CR018 on TS25.453v5.3.0
	<input type="checkbox"/>	O&M Specifications	
Other comments:	⌘		

How to create CRs using this form:

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http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

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- If an error that terminates a procedure occurs, the returned cause value shall reflect the error that caused the termination of the procedure even if one or more abstract syntax errors with criticality “ignore and notify” have earlier occurred within the same procedure.

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Clarification for the usage of the cause value		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI Date: ⌘ 2002-May		
Category:	⌘ A Release: ⌘ REL-5		
	<table border="0"> <tr> <td style="vertical-align: top;"> <p>Use <u>one</u> of the following categories:</p> <p>F (correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (addition of feature),</p> <p>C (functional modification of feature)</p> <p>D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> </td> <td style="vertical-align: top;"> <p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>REL-4 (Release 4)</p> <p>REL-5 (Release 5)</p> </td> </tr> </table>	<p>Use <u>one</u> of the following categories:</p> <p>F (correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (addition of feature),</p> <p>C (functional modification of feature)</p> <p>D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>REL-4 (Release 4)</p> <p>REL-5 (Release 5)</p>
<p>Use <u>one</u> of the following categories:</p> <p>F (correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (addition of feature),</p> <p>C (functional modification of feature)</p> <p>D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>REL-4 (Release 4)</p> <p>REL-5 (Release 5)</p>		

Reason for change: ⌘ The cause value, "Abstract Syntax Error (Ignore and Notify)", should not be set to the Cause IE. Please see R3-020971.

In case of abstract syntax error occurs in the IE which has the criticality of Ignore and Notify, the procedure shall be continue as if that error IE is not present and report in the response message(for class 1), or in Errir Indication (for class 2) that the error IE has been ignored.

However, in the above case, if the receiver further detect an error e.g. sementic error which should terminate the procedure, it is not clear what cause value(either Abstract Syntax Error (Ignore and Notify) or Sementic Error) shall be set in the failure message(for class 1) or Error ndication (for class 2).

Summary of change: ⌘ Rev.1

Impact Analysis statement was corrected.

Rev.0

It was clarified that if an error that terminates a procedure occurs, the returned cause value shall reflect the error that caused the termination of the procedure even if one or more abstract syntax errors with criticality "ignore and notify" have earlier occurred within the same procedure.

Consequences if not approved: ⌘ If this CR is not approved, unsuitable cause value might be set to the Cause IE.

Impact Analysis:

Impact assessment towards the previous version of the specification (same release):

		CR098 on TS25.419v3.8.0
		CR099 on TS25.419v4.4.0
		CR100 on TS25.419v5.0.0
		CR654 on TS25.423v3.9.0
		CR655 on TS25.423v4.4.0
		CR656 on TS25.423v5.0.0
		CR684 on TS25.433v3.9.0
		CR685 on TS25.433v4.4.0
		CR018 on TS25.453v5.3.0
affected:	<input type="checkbox"/>	Test specifications
	<input type="checkbox"/>	O&M Specifications
Other comments:	⌘	

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

10.5 Exceptions

The error handling for all the cases described hereafter shall take precedence over any other error handling described in the other subclauses of clause 10.

- If any type of error (Transfer Syntax Error, Abstract Syntax Error or Logical Error) is detected in the ERROR INDICATION message, it shall not trigger the Error Indication procedure in the receiving Node but local error handling.
- In case a response message, failure message or ERROR INDICATION message needs to be returned, but the information necessary to determine the receiver of that message is missing, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.
- If an error that terminates a procedure occurs, the returned cause value shall reflect the error that caused the termination of the procedure even if one or more abstract syntax errors with criticality “ignore and notify” have earlier occurred within the same procedure.

CHANGE REQUEST

⌘ **25.433 CR 696** ⌘ ev **1** ⌘ Current version: **3.9.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ TFCI2 bearer clarification		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May, 2002
Category:	⌘ F	Release:	⌘ R99
	<i>Use <u>one</u> of the following categories:</i> F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		<i>Use <u>one</u> of the following releases:</i> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change:	⌘ It is not clearly stated in the current specification that there is one TFCI2 bearer for one Node B communication context.
Summary of change:	⌘ R1: In the semantic description, "There is" was changed to "There shall be only". R0: The procedure text of Radio Link Reconfiguration procedure has been clarified to indicate that there is one TFCI2 bearer per Node B communication context. Also the procedure text of Radio Link Deletion procedure has been clarified so that when the RL which carries the PDSCH is removed, the resources associated with the TFCI2 bearer shall not be deleted unless the last RL of the Node B communication context has been removed. The semantic description of Radio Link Reconfiguration Ready message and Radio Link Setup Failure message has been clarified with indication that only one TFCI2 bearer exists per one Node B communication context. The semantic description text has been added as comments to the ASN.1 part. Impact Analysis: Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release) because the handling of TFCI2 bearers was not clear at RL reconfiguration and RL deletion. The impact is isolated in the DSCH function only.
Consequences if not approved:	⌘ If this CR is not approved, the specification is not unambiguous, and this might lead to interoperability problems.

Clauses affected:	⌘	8.3.2.2, 8.3.6.2, 9.1.38.1, 9.1.43, 9.3.3	
Other specs affected:	⌘	<input checked="" type="checkbox"/> Other core specifications	⌘ CR697r1 25.433 V4.4.0 CR698r1 25.433 V5.0.0
		<input type="checkbox"/> Test specifications	
		<input type="checkbox"/> O&M Specifications	
Other comments:	⌘		

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- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.3.2 Synchronised Radio Link Reconfiguration Preparation

8.3.2.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one UE-UTRAN connection within a Node B.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.2.2 Successful Operation

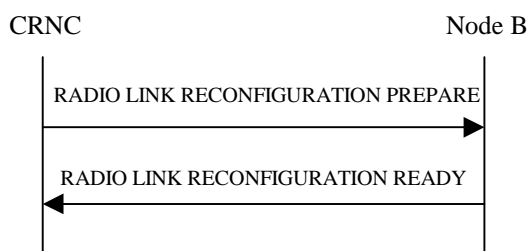


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the CRNC by sending the message RADIO LINK RECONFIGURATION PREPARE to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Modify* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the UL of a DCH, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the DL of a DCH, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes multiple *DCH Specific Info* IEs then the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs to Modify* IE includes the *UL FP Mode* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

- If the *DCHs to Modify* IE includes the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new *ToAWE* in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the Downlink of this DCH in the new configuration.]
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Add* IE includes multiple *DCH specific Info* IEs then, the Node B shall treat the DCHs in the *DCHs to Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD – If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected" the Physical channel BER shall be used for the QE, ref. [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received *Frame Handling Priority* should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Delete* IEs, the Node B shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of coordinated DCHs are requested to be deleted, the Node B shall not include this set of coordinated DCHs in the new configuration.

Physical Channel Modification:

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *UL DPCH Information* IE then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPDCCHs* IE (if it is included) in the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]
- [FDD – If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD – The Node B shall use the *TFCS* IE for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL DPCCCH Slot Format* IE, the Node B shall set the new Uplink DPCCCH Structure to the new configuration.]
- [FDD - If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the Node B shall apply diversity according to the given value.]
- [FDD – If the *UL DPCH Information* IE includes an *SSDT Cell Identity Length* IE and/or an *S-Field Length* IE, the Node B shall apply the values in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information* IE then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – The Node B shall use the *TFCS* IE for the DL (if it is present) when reserving resources for the downlink of the new configuration. The Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE or the *TFCI Presence* IE, the Node B shall use the information when building TFCIs in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *DL DPCCCH Slot Format* IE, group the Node B shall set the new Downlink DPCCCH Structure to the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the Node B shall apply the indicated multiplexing type in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to 'Used', the Node B shall, if supported, use Limited Power Increase ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to 'Not Used', the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH code mapping* IE then the Node B shall apply the defined mapping between TFCI values and PDSCH channelisation codes.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH RL ID* IE then the Node B shall infer that the PDSCH for the specified user will be transmitted on the defined radio link.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Modify* or *DL CCTrCH to Modify* IEs, then the Node B shall treat them each as follows:]

- [TDD – If the IE includes any of *TFCS* IE, *TFCI coding* IE or *Puncture Limit* IE the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]

- [TDD – If the IE includes any *UL DPCH to add* or *DL DPCH to add* IEs, the Node B shall include this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH to delete* or *DL DPCH to delete* IEs, the Node B shall remove this DPCH in the new configuration.]
 - [TDD – If the IE includes any *UL DPCH to modify* or *DL DPCH to modify* IEs, and includes any of *Repetition Period* IE, *Repetition Length* IE, or *TDD DPCH Offset* IE or the message includes *UL/DL Timeslot Information* and includes any of *Midamble shift and Burst Type* IE, *Time Slot* IE, or *TFCI presence* IE or the message includes *UL/DL Code* information and includes *TDD Channelisation Code* IE, the Node B shall apply these specified information elements as the new values, otherwise the old values specified for this DPCH configuration are still applicable.]

[TDD – UL/DL CCTrCH Addition]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Add* IE or *DL CCTrCH to Add* IE, the Node B shall include this CCTrCH in the new configuration.]

[TDD – If the *UL/DL CCTrCH to Add* IE includes any *UL/DL DPCH Information* IE, the Node B shall reserve necessary resources for the new configuration of the UL/DL DPCH(s) according to the parameters given in the message.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL CCTrCH to Add* IE, the Node B shall set the TPC step size of that CCTrCH to the same value as the lowest numbered DL CCTrCH in the current configuration.]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any UL or DL CCTrCH to be deleted, the Node B shall remove this CCTrCH in the new configuration.]

DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH to modify*, *DSCH to add* or *DSCH to delete* IEs, then the Node B shall use this information to add/modify/delete the indicated DSCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DSCH.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Information* IE then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received if one does not already exist or shall apply the new values if such a bearer does already exist for this Node B communication context. The *Binding ID* IE and *Transport Layer Address* IE of any new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message. If the RADIO LINK RECONFIGURATION PREPARE message specifies that the TFCI2 transport bearer is to be deleted then the Node B shall release the resources associated with that bearer in the new configuration.

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI field but a TFCI2 transport bearer has not already been set up and *TFCI2 Bearer Information* IE is not included in the message then the Node B shall transmit the TFCI2 field with zero power in the new configuration.]

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information* IE is included in the message then the Node B shall transmit the TFCI2 field with zero power until Synchronisation is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer in the new configuration (see ref. [24]).]

[TDD – USCH Addition/Modification/Deletion:]

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]

- [TDD – The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each USCH.]

RL Information:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B may activate SSDT using the *SSDT Cell Identity* IE in the new configuration.]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the Node B shall deactivate SSDT in the new configuration.]
- [FDD – If the *RL Information* IE includes a *DL Code Information* IE containing a *DL Scrambling Code* IE, the Node B shall apply the values in the new configuration.]
- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- If the *RL Information* IE includes the *Maximum DL Power* and/or the *Minimum DL Power* IEs, the Node B shall apply the values in the new configuration. [FDD - During compressed mode, the $P_{SIR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k .]
- [TDD – If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall apply the given power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu is achieved for the CCTrCH. If no *Initial DL Transmission power* IE is included with a new CCTrCH, the Node B shall use any transmission power level currently used on already existing CCTrCH's when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]

General

If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exist a Prepared Reconfiguration, as defined in subclause 3.1.

In the RADIO LINK RECONFIGURATION READY message, the Node B shall include the *RL Information Response* IE for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the Transport Layer Address and the Binding ID for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In case of a DCH requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* shall be included in the *DCH Information Response* IE.

In case of a set of coordinated DCHs requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the DCH in the set of coordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the Node B, the *RL Information Response* IE shall be included only for one of the combined RLs. The *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

8.3.6 Radio Link Deletion

8.3.6.1 General

The Radio Link Deletion procedure is used to release the resources in a Node B for one or more established radio links towards a UE.

The Radio Link Deletion procedure may be initiated by the CRNC at any time when the Node B Communication Context exists.

8.3.6.2 Successful Operation

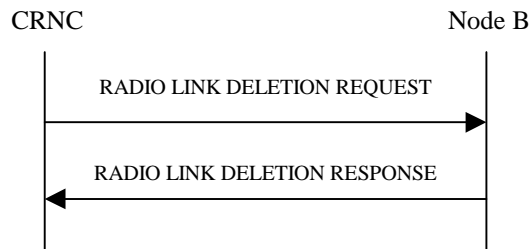


Figure 36: Radio Link Deletion procedure, Successful Operation

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the CRNC to the Node B.

Upon receipt of this message, the Node B shall delete the radio link(s) identified by the *RL ID IE, Node B Communication ID IE and CRNC Communication ID IE* and release all associated resources and respond to the CRNC with a RADIO LINK DELETION RESPONSE message. [FDD – Resources associated with the TFCI2 bearer shall be released only if all the RLs in the Node B communication context are deleted].

[FDD – After deletion of the RL(s), the UL out-of-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the maximum value of the parameters N_OUTSYNC_IND and T_RLFAILURE, and the minimum value of the parameters N_INSYNC_IND, that are configured in the cells supporting the radio links of the RL Set].

8.3.6.3 Unsuccessful Operation

-

8.3.6.4 Abnormal Conditions

If the RL indicated by the *RL ID IE, Node B Communication ID IE and CRNC Communication ID IE* does not exist, the Node B shall respond with the RADIO LINK DELETION RESPONSE message and use the *CRNC Communication Context ID IE* received in the RADIO LINK DELETION REQUEST message.

9.1.38 RADIO LINK SETUP FAILURE

9.1.38.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	C-Success		9.2.1.48	The reserved value "All NBCC" shall not be used	YES	ignore
Communication Control Port ID	O		9.2.1.15		YES	ignore
CHOICE <i>Cause Level</i>	M				YES	ignore
> <i>General</i>					–	
>> <i>Cause</i>	M		9.2.1.6		–	
> <i>RL specific</i>					–	
>> Unsuccessful RL Information Response		1 to <maxnoo fRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>> Successful RL Information Response		0 to <maxnoo fRLs–1>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>RL Set ID	M		9.2.2.39			
>>>Received total wide band power	M		9.2.2.39A		–	
>>>Diversity Indication	C-NotFirstRL		9.2.1.26		–	
>>>CHOICE <i>Diversity Indication</i>	M				–	
>>>> <i>Combining</i>					–	
>>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	–	
>>>> <i>Non Combining or First RL</i>					–	
>>>>DCH Information Response	M		9.2.1.20C		-	
>>>DSCH Information Response	O		9.2.1.27A		YES	ignore
>>>TFCI2 Bearer Information Response	O		9.2.2.49A	<u>There shall be only one TFCI2 bearer per Node B communication context.</u>	-	

>>>SSDT Support Indicator	M		9.2.2.46		-	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Condition	Explanation
Success	The IE shall be present if at least one of the radio links has been successfully set up.
NotFirstRL	The IE shall be present if the RL is not the first one in the <i>Successful RL Information Response</i> IE.

9.1.43 RADIO LINK RECONFIGURATION READY

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information Response		<i>0..<max noofRLs ></i>		Only one RL information response group for one group of combined RLs shall be present	EACH	ignore
>RL ID	M		9.2.1.53		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29	TDD only	YES	ignore
>TFCI2 Bearer Information Response	O		9.2.2.49A	FDD only. <u>There shall be only one TFCI2 bearer per Node B communication context.</u>	–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for NBAP.
--
-- *****
```

```
***** UNCHANGED PARTS OMITTED *****
```

```
-- *****
--
-- RADIO LINK SETUP FAILURE FDD
--
-- *****
```

```
RadioLinkSetupFailureFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupFailureFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}} OPTIONAL,
    ...
}
```

```
RadioLinkSetupFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID
      PRESENCE mandatory    }|
    { ID      id-NodeB-CommunicationContextID
      PRESENCE conditional  }|
    -- This IE shall be present if at least one of the radio links has been successfully set up
    { ID      id-CommunicationControlPortID
      PRESENCE optional     }|
    { ID      id-CauseLevel-RL-SetupFailureFDD
      PRESENCE mandatory    }|
    { ID      id-CriticalityDiagnostics
      PRESENCE optional     },
    ...
}
```

```
RadioLinkSetupFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```

CauseLevel-RL-SetupFailureFDD ::= CHOICE {
    generalCause      GeneralCauseList-RL-SetupFailureFDD,
    rLSpecificCause   RLSpecificCauseList-RL-SetupFailureFDD,
    ...
}

GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    cause              Cause,
    iE-Extensions      ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
    ...
}

GeneralCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-SetupFailureFDD   Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD,
    successful-RL-InformationRespList-RL-SetupFailureFDD     Successful-RL-InformationRespList-RL-SetupFailureFDD OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD }}

Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD      CRITICALITY   ignore      TYPE   Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD      PRESENCE   mandatory}
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID          RL-ID,
    cause          Cause,
    iE-Extensions  ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
    ...
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Successful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1.. maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Successful-RL-InformationRespItemIE-RL-SetupFailureFDD }}

Successful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {

```

```

{ ID      id-Successful-RL-InformationRespItem-RL-SetupFailureFDD
SetupFailureFDD      PRESENCE      mandatory}
}

Successful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID                RL-ID,
  rL-Set-ID            RL-Set-ID,
  received-total-wide-band-power      Received-total-wide-band-power-Value,
  diversityIndication DiversityIndication-RL-SetupFailureFDD,
  -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
  -- the tabular message format in subclause 9.1.
  dSCH-InformationResponseList        DSCH-InformationRespList-RL-SetupFailureFDD      OPTIONAL,
  tFCI2-BearerInformationResponse      TFCI2-BearerInformationResponse      OPTIONAL,
  -- There shall be only one TFCI2 bearer per Node B communication context.
  sSDT-SupportIndicator                SSDT-SupportIndicator,
  iE-Extensions                        ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs } }
  OPTIONAL,
  ...
}

```

***** UNCHANGED PARTS OMITTED *****

```
-- *****
--
-- RADIO LINK RECONFIGURATION READY
--
-- *****
```

```
RadioLinkReconfigurationReady ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container   {{RadioLinkReconfigurationReady-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationReady-Extensions}} OPTIONAL,
  ...
}
```

```
RadioLinkReconfigurationReady-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID          CRITICALITY ignore      TYPE CRNC-CommunicationContextID
  PRESENCE mandatory } |
  { ID id-RL-InformationResponseList-RL-ReconfReady CRITICALITY ignore      TYPE RL-InformationResponseList-RL-ReconfReady
  PRESENCE optional } |
  { ID id-CriticalityDiagnostics              CRITICALITY ignore      TYPE CriticalityDiagnostics          PRESENCE
  optional },
  ...
}
```

```
RadioLinkReconfigurationReady-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
RL-InformationResponseList-RL-ReconfReady ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-RL-ReconfReady}}
```

```
RL-InformationResponseItemIE-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponseItem-RL-ReconfReady CRITICALITY ignore      TYPE RL-InformationResponseItem-RL-ReconfReady
  PRESENCE mandatory }
}
```

```
RL-InformationResponseItem-RL-ReconfReady ::= SEQUENCE {
  rL-ID          RL-ID,
  dCH-InformationResponseList-RL-ReconfReady DCH-InformationResponseList-RL-ReconfReady OPTIONAL,
  dSCH-InformationResponseList-RL-ReconfReady DSCH-InformationResponseList-RL-ReconfReady OPTIONAL,
  uSCH-InformationResponseList-RL-ReconfReady USCH-InformationResponseList-RL-ReconfReady OPTIONAL,
  tFCI2-BearerInformationResponse TFCI2-BearerInformationResponse OPTIONAL,
  --FDD only. There shall be only one TFCI2 bearer per Node B communication context.
  iE-Extensions ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfReady-ExtIEs} } OPTIONAL,
  ...
}
```


CHANGE REQUEST

⌘ **25.433 CR 697** ⌘ ev **1** ⌘ Current version: **4.4.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ TFCI2 bearer clarification		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May, 2002
Category:	⌘ A	Release:	⌘ REL-4
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900.		REL-4 (Release 4)
			REL-5 (Release 5)

Reason for change: ⌘ It is not clearly stated in the current specification that there is one TFCI2 bearer for one Node B communication context.

Summary of change: ⌘ R1:
In the semantic description, "There is" was changed to "There shall be only".

R0:
The procedure text of Radio Link Reconfiguration procedure has been clarified to indicate that there is one TFCI2 bearer per Node B communication context.

Also the procedure text of Radio Link Deletion procedure has been clarified so that when the RL which carries the PDSCH is removed, the resources associated with the TFCI2 bearer shall not be deleted unless the last RL of the Node B communication context has been removed. The semantic description of Radio Link Reconfiguration Ready message and Radio Link Setup Failure message has been clarified with indication that only one TFCI2 bearer exists per one Node B communication context.

The semantic description text has been added as comments to the ASN.1 part.

Impact Analysis:
Impact assessment towards the previous version of the specification (same release):
This CR has isolated impact with the previous version of the specification (same release) because the handling of TFCI2 bearers was not clear at RL reconfiguration and RL deletion. The impact is isolated in the DSCH function only.

Consequences if not approved: ⌘ If this CR is not approved, the specification is not unambiguous, and this might lead to interoperability problems.

Clauses affected:	⌘	8.3.2.2, 8.3.6.2, 9.1.38.1, 9.1.43. 9.3.3	
Other specs affected:	⌘	<input checked="" type="checkbox"/> Other core specifications	⌘ CR696r1 25.433 V3.9.0 CR698r1 25.433 V5.0.0
		<input type="checkbox"/> Test specifications	
		<input type="checkbox"/> O&M Specifications	
Other comments:	⌘		

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/>. For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.3.2 Synchronised Radio Link Reconfiguration Preparation

8.3.2.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one UE-UTRAN connection within a Node B.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.2.2 Successful Operation

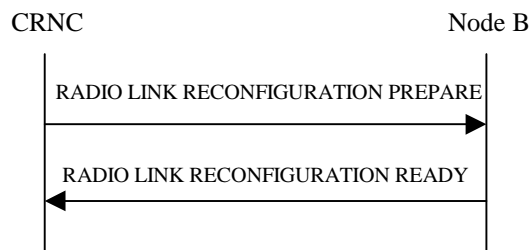


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the CRNC by sending the message RADIO LINK RECONFIGURATION PREPARE to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Modify* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the UL of a DCH, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the DL of a DCH, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes multiple *DCH Specific Info* IEs then the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs to Modify* IE includes the *UL FP Mode* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

- If the *DCHs to Modify* IE includes the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new *ToAWE* in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the Downlink of this DCH in the new configuration.]
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Add* IE includes multiple *DCH specific Info* IEs then, the Node B shall treat the DCHs in the *DCHs to Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD – If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected" the Physical channel BER shall be used for the QE, ref. [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received *Frame Handling Priority* should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Delete* IEs, the Node B shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of coordinated DCHs are requested to be deleted, the Node B shall not include this set of coordinated DCHs in the new configuration.

Physical Channel Modification:

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *UL DPCH Information* IE then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPCHs* IE (if it is included) in the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]
- [FDD – If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD – The Node B shall use the *TFCS* IE for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL DPCCCH Slot Format* IE, the Node B shall set the new Uplink DPCCCH Structure to the new configuration.]
- [FDD - If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the Node B shall apply diversity according to the given value.]
- [FDD – If the *UL DPCH Information* IE includes an *SSDT Cell Identity Length* IE and/or an *S-Field Length* IE, the Node B shall apply the values in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information* IE then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – The Node B shall use the *TFCS* IE for the DL (if it is present) when reserving resources for the downlink of the new configuration. The Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE or the *TFCI Presence* IE, the Node B shall use the information when building TFCIs in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *DL DPCCCH Slot Format* IE, group the Node B shall set the new Downlink DPCCCH Structure to the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the Node B shall apply the indicated multiplexing type in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to 'Used', the Node B shall, if supported, use Limited Power Increase ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to 'Not Used', the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH code mapping* IE then the Node B shall apply the defined mapping between TFCI values and PDSCH channelisation codes.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH RL ID* IE then the Node B shall infer that the PDSCH for the specified user will be transmitted on the defined radio link.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Modify* or *DL CCTrCH to Modify* IEs, then the Node B shall treat them each as follows:]

- [TDD – If the IE includes any of *TFCS* IE, *TFCI coding* IE or *Puncture Limit* IE the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]

- [TDD – If the IE includes any *UL DPCH to add* or *DL DPCH to add* IEs, the Node B shall include this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH to delete* or *DL DPCH to delete* IEs, the Node B shall remove this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH to modify* or *DL DPCH to modify* IEs, and includes any of *Repetition Period IE*, *Repetition Length IE*, or *TDD DPCH Offset IE* or the message includes *UL/DL Timeslot Information* and includes any of [*3.84Mcps TDD - Midamble shift and Burst Type IE*, *Time Slot IE*], [*1.28Mcps TDD - Midamble shift LCR IE*, *Time Slot LCR IE*], or *TFCI presence IE* or the message includes *UL/DL Code information* and includes [*3.84Mcps TDD - TDD Channelisation Code IE*], [*1.28Mcps TDD - TDD Channelisation Code LCR IE*], the Node B shall apply these specified information elements as the new values, otherwise the old values specified for this DPCH configuration are still applicable.]
- [1.28Mcps TDD – If the *UL CCTrCH to Modify* IE includes the *UL SIR Target IE*, the Node B shall use the value for the UL inner loop power control according [19] and [21] when the new configuration is being used.]

[TDD – UL/DL CCTrCH Addition]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Add IE* or *DL CCTrCH to Add IE*, the Node B shall include this CCTrCH in the new configuration.]

[TDD – If the *UL/DL CCTrCH to Add IE* includes any *UL/DL DPCH Information IE*, the Node B shall reserve necessary resources for the new configuration of the UL/DL DPCH(s) according to the parameters given in the message.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL CCTrCH to Add IE*, the Node B shall set the TPC step size of that CCTrCH to the same value as the lowest numbered DL CCTrCH in the current configuration.]

[1.28Mcps TDD –The Node B shall use the *UL SIR Target IE* in the *UL CCTrCH to Add IE* as the UL SIR value for the inner loop power control for this CCTrCH according [19] and [21] in the new configuration.]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any UL or DL CCTrCH to be deleted , the Node B shall remove this CCTrCH in the new configuration.]

DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH to modify*, *DSCH to add* or *DSCH to delete* IEs, then the Node B shall use this information to add/modify/delete the indicated DSCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address IE* and the *Binding ID IE* for the transport bearer to be established for each DSCH.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Information IE* then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received if one does not already exist or shall apply the new values if such a bearer does already exist for this Node B communication context. The *Binding ID IE* and *Transport Layer Address IE* of any new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message. If the RADIO LINK RECONFIGURATION PREPARE message specifies that the TFCI2 transport bearer is to be deleted then the Node B shall release the resources associated with that bearer in the new configuration.

[FDD – If the *TFCI Signalling Mode IE* within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI field but a TFCI2 transport bearer has not already been set up and *TFCI2 Bearer Information IE* is not included in the message then the Node B shall transmit the TFCI2 field with zero power in the new configuration.]

[FDD – If the *TFCI Signalling Mode IE* within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information IE* is included in the message then the Node B shall transmit the TFCI2 field with zero power until Synchronisation is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer in the new configuration (see ref. [24]).]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *DSCH Common Information IE*, the Node B shall treat it as follows:]

- [FDD - If the *Enhanced DSCH PC Indicator IE* is included and set to "Enhanced DSCH PC Active in the UE", the Node B shall activate enhanced DSCH power control in accordance with ref. [10] subclause 5.2.2, if supported, using either:]
- [FDD - the *SSDT Cell Identity for EDSCHPC IE* in the *RL Information IE*, if the *SSDT Cell Identity IE* is not included in the *RL Information IE* or]
- [FDD - the *SSDT Cell Identity IE* in the *RL Information IE*, if both the *SSDT Cell Identity IE* and the *SSDT Cell Identity for EDSCHPC IE* are included in the *RL Information IE*.]

[FDD - together with the *SSDT Cell Identity Length IE* in *UL DPCH Information IE*, and *Enhanced DSCH PC IE*, in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Enhanced DSCH PC Indicator IE* set to "Enhanced DSCH PC not Active in the UE", the Node B shall deactivate enhanced DSCH power control in the new configuration.]

[TDD – USCH Addition/Modification/Deletion:]

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]
- [TDD – The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address IE* and the *Binding ID IE* for the transport bearer to be established for each USCH.]

RL Information:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *RL Information IE*, the Node B shall treat it as follows:

- [FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]
- [FDD – If the *RL Information IE* includes the *SSDT Indication IE* set to "SSDT Active in the UE", the Node B may activate SSDT using the *SSDT Cell Identity IE* in the new configuration.]
- [FDD – If the *RL Information IE* includes the *SSDT Indication IE* set to "SSDT not Active in the UE", the Node B shall deactivate SSDT in the new configuration.]
- [FDD – If the *RL Information IE* includes a *DL Code Information IE*, the Node B shall apply the values in the new configuration.]
- [FDD – If the *RL Information IE* contains the *Transmission Gap Pattern Sequence Code Information IE* in the *DL Code Information IE* for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- If the *RL Information IE* includes the *Maximum DL Power* and/or the *Minimum DL Power* IEs, the Node B shall apply the values in the new configuration. [FDD - During compressed mode, the $P_{SR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k .]
- [TDD – If the *RL Information IE* includes the *Initial DL Transmission Power IE*, the Node B shall apply the given power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu is achieved for the CCTrCH. If no *Initial DL Transmission power IE* is included with a new CCTrCH, the Node B shall use any transmission power level currently used on already existing CCTrCH's when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]

General

If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exist a Prepared Reconfiguration, as defined in subclause 3.1.

In the RADIO LINK RECONFIGURATION READY message, the Node B shall include the *RL Information Response* IE for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the Transport Layer Address and the Binding ID for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In case of a DCH requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* shall be included in the IE *DCH Information Response* IE.

In case of a set of coordinated DCHs requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the DCH in the set of coordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the Node B, the *RL Information Response* IE shall be included only for one of the combined RLs. The *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

8.3.6 Radio Link Deletion

8.3.6.1 General

The Radio Link Deletion procedure is used to release the resources in a Node B for one or more established radio links towards a UE.

The Radio Link Deletion procedure may be initiated by the CRNC at any time when the Node B Communication Context exists.

8.3.6.2 Successful Operation

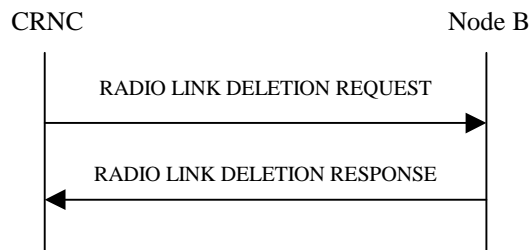


Figure 36: Radio Link Deletion procedure, Successful Operation

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the CRNC to the Node B.

Upon receipt of this message, the Node B shall delete the radio link(s) identified by the *RL ID IE*, *Node B Communication ID IE* and *CRNC Communication ID IE* and release all associated resources and respond to the CRNC with a RADIO LINK DELETION RESPONSE message. [FDD - Resources associated with the TFCI2 bearer shall be released only if all the RLs in the Node B communication context are deleted].

[FDD – After deletion of the RL(s), the UL out-of-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the maximum value of the parameters *N_OUTSYNC_IND* and *T_RLFAILURE*, and the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells supporting the radio links of the RL Set].

9.1.38 RADIO LINK SETUP FAILURE

9.1.38.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	C-Success		9.2.1.48	The reserved value "All NBCC" shall not be used	YES	ignore
Communication Control Port ID	O		9.2.1.15		YES	ignore
CHOICE <i>Cause Level</i>	M				YES	ignore
> <i>General</i>					–	
>> <i>Cause</i>	M		9.2.1.6		–	
> <i>RL specific</i>					–	
>> Unsuccessful RL Information Response		1 to <maxnoo fRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>> Successful RL Information Response		0 to <maxnoo fRLs–1>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>RL Set ID	M		9.2.2.39			
>>>Received total wide band power	M		9.2.2.39A		–	
>>>Diversity Indication	C-NotFirstRL		9.2.1.26		–	
>>>CHOICE <i>Diversity Indication</i>	M				–	
>>>> <i>Combining</i>					–	
>>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	–	
>>>> <i>Non Combining or First RL</i>					–	
>>>>DCH Information Response	M		9.2.1.20C		-	
>>>DSCH Information Response	O		9.2.1.27A		YES	ignore
>>>TFCI2 Bearer Information Response	O		9.2.2.49A	<u>There shall be only one TFCI2 bearer per Node B communication context.</u>	-	

>>>SSDT Support Indicator	M		9.2.2.46		-	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.43 RADIO LINK RECONFIGURATION READY

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information Response		<i>0..<max noofRLs ></i>		Only one RL information response group for one group of combined RLs shall be present	EACH	ignore
>RL ID	M		9.2.1.53		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29	TDD only	YES	ignore
>TFCI2 Bearer Information Response	O		9.2.2.49A	FDD only. <u>There shall be only one TFCI2 bearer per Node B communication context.</u>	–	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for NBAP.
--
-- *****
```

***** UNCHANGED PART OMITTED

```
-- *****
--
-- RADIO LINK SETUP FAILURE FDD
--
-- *****
```

```
RadioLinkSetupFailureFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupFailureFDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}}
    ...
}

RadioLinkSetupFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID
      ID      id-NodeB-CommunicationContextID
      PRESENCE mandatory
      CRITICALITY ignore
      TYPE CRNC-CommunicationContextID
    }|
    { ID      id-NodeB-CommunicationContextID
      ID      id-NodeB-CommunicationContextID
      PRESENCE conditional
      CRITICALITY ignore
      TYPE NodeB-CommunicationContextID
    }|
    -- This IE shall be present if at least one of the radio links has been successfully set up
    { ID      id-CommunicationControlPortID
      ID      id-CommunicationControlPortID
      PRESENCE optional
      CRITICALITY ignore
      TYPE CommunicationControlPortID
    }|
    { ID      id-CauseLevel-RL-SetupFailureFDD
      ID      id-CauseLevel-RL-SetupFailureFDD
      PRESENCE mandatory
      CRITICALITY ignore
      TYPE CauseLevel-RL-SetupFailureFDD
    }|
    { ID      id-CriticalityDiagnostics
      ID      id-CriticalityDiagnostics
      PRESENCE optional
      CRITICALITY ignore
      TYPE CriticalityDiagnostics
    }
    ...
}

RadioLinkSetupFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```

CauseLevel-RL-SetupFailureFDD ::= CHOICE {
    generalCause      GeneralCauseList-RL-SetupFailureFDD,
    rLspecificCause   RLspecificCauseList-RL-SetupFailureFDD,
    ...
}

GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    cause              Cause,
    iE-Extensions     ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
    ...
}

GeneralCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLspecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-SetupFailureFDD,
    successful-RL-InformationRespList-RL-SetupFailureFDD OPTIONAL,
    iE-Extensions     ProtocolExtensionContainer { { RLspecificCauseItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
    ...
}

RLspecificCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}

Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD      CRITICALITY      ignore      TYPE      Unsuccessful-RL-
InformationRespItem-RL-SetupFailureFDD      PRESENCE      mandatory}
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID          RL-ID,
    cause          Cause,
    iE-Extensions ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs } }
    OPTIONAL,
    ...
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Successful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1.. maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}

Successful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-Successful-RL-InformationRespItem-RL-SetupFailureFDD      CRITICALITY      ignore      TYPE      Successful-RL-
InformationRespItem-RL-SetupFailureFDD      PRESENCE      mandatory}
}

```

```
}  
Successful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {  
    rL-ID                               RL-ID,  
    rL-Set-ID                           RL-Set-ID,  
    received-total-wide-band-power      Received-total-wide-band-power-Value,  
    diversityIndication                 DiversityIndication-RL-SetupFailureFDD,  
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in  
    -- the tabular message format in subclause 9.1.  
    dSCH-InformationResponseList        DSCH-InformationRespList-RL-SetupFailureFDD    OPTIONAL,  
    tFCI2-BearerInformationResponse      TFCI2-BearerInformationResponse    OPTIONAL,  
    -- There shall be only one TFCI2 bearer per Node B communication context.  
    sSDT-SupportIndicator                SSDT-SupportIndicator,  
    iE-Extensions                        ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs } }  
    OPTIONAL,  
    ...  
}
```

***** UNCHANGED PART OMITTED

```
-- *****
--
-- RADIO LINK RECONFIGURATION READY
--
-- *****
```

```
RadioLinkReconfigurationReady ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{RadioLinkReconfigurationReady-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationReady-Extensions}}
  ...
}
OPTIONAL,
```

```
RadioLinkReconfigurationReady-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CRNC-CommunicationContextID          CRITICALITY  ignore      TYPE          CRNC-CommunicationContextID
    PRESENCE  mandatory } |
  { ID      id-RL-InformationResponseList-RL-ReconfReady  CRITICALITY  ignore      TYPE          RL-InformationResponseList-RL-
ReconfReady  PRESENCE  optional } |
  { ID      id-CriticalityDiagnostics                CRITICALITY  ignore      TYPE          CriticalityDiagnostics
    PRESENCE  optional },
  ...
}
```

```
RadioLinkReconfigurationReady-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
RL-InformationResponseList-RL-ReconfReady ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-RL-
ReconfReady}}
```

```
RL-InformationResponseItemIE-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
  { ID      id-RL-InformationResponseItem-RL-ReconfReady  CRITICALITY  ignore      TYPE          RL-InformationResponseItem-
RL-ReconfReady  PRESENCE  mandatory}
}
```

```
RL-InformationResponseItem-RL-ReconfReady ::= SEQUENCE {
  rL-ID          RL-ID,
  dCH-InformationResponseList-RL-ReconfReady  DCH-InformationResponseList-RL-ReconfReady  OPTIONAL,
  dSCH-InformationResponseList-RL-ReconfReady  DSCH-InformationResponseList-RL-ReconfReady  OPTIONAL,
  uSCH-InformationResponseList-RL-ReconfReady  USCH-InformationResponseList-RL-ReconfReady  OPTIONAL,
  tFCI2-BearerInformationResponse  TFCI2-BearerInformationResponse  OPTIONAL,
```


--FDD only. There shall be only one TFCI2 bearer per Node B communication context.
iE-Extensions ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfReady-ExtIEs} } OPTIONAL, |
...
}

CHANGE REQUEST

⌘ **25.433 CR 698** ⌘ ev **1** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ TFCI2 bearer clarification		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May, 2002
Category:	⌘ A	Release:	⌘ REL-5
	<i>Use <u>one</u> of the following categories:</i> F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		<i>Use <u>one</u> of the following releases:</i> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change:	⌘ It is not clearly stated in the current specification that there is one TFCI2 bearer for one Node B communication context.
Summary of change:	⌘ R1: In the semantic description, "There is" was changed to "There shall be only". R0: The procedure text of Radio Link Reconfiguration procedure has been clarified to indicate that there is one TFCI2 bearer per Node B communication context. Also the procedure text of Radio Link Deletion procedure has been clarified so that when the RL which carries the PDSCH is removed, the resources associated with the TFCI2 bearer shall not be deleted unless the last RL of the Node B communication context has been removed. The semantic description of Radio Link Reconfiguration Ready message and Radio Link Setup Failure message has been clarified with indication that only one TFCI2 bearer exists per one Node B communication context. The semantic description text has been added as comments to the ASN.1 part. Impact Analysis: Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release) because the handling of TFCI2 bearers was not clear at RL reconfiguration and RL deletion. The impact is isolated in the DSCH function only.
Consequences if not approved:	⌘ If this CR is not approved, the specification is not unambiguous, and this might lead to interoperability problems.

Clauses affected:	⌘	8.3.2.2, 8.3.6.2, 9.1.38.1, 9.1.43, 9.3.3	
Other specs affected:	⌘	<input checked="" type="checkbox"/>	Other core specifications
		<input type="checkbox"/>	Test specifications
		<input type="checkbox"/>	O&M Specifications
Other comments:	⌘		

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/>. For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.3.2 Synchronised Radio Link Reconfiguration Preparation

8.3.2.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one UE-UTRAN connection within a Node B.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.2.2 Successful Operation

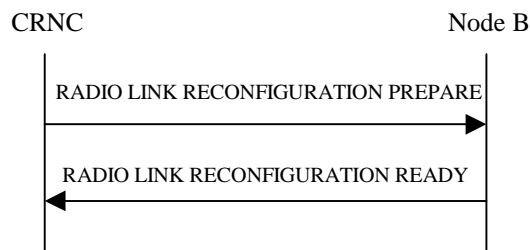


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the CRNC by sending the message RADIO LINK RECONFIGURATION PREPARE to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Modify* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the UL of a DCH, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the DL of a DCH, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes multiple *DCH Specific Info* IEs then the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs to Modify* IE includes the *UL FP Mode* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

- If the *DCHs to Modify* IE includes the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new *ToAWE* in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the Downlink of this DCH in the new configuration.]
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Add* IE includes multiple *DCH specific Info* IEs then, the Node B shall treat the DCHs in the *DCHs to Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD – If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected" the Physical channel BER shall be used for the QE, ref. [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received *Frame Handling Priority* should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Delete* IEs, the Node B shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of coordinated DCHs are requested to be deleted, the Node B shall not include this set of coordinated DCHs in the new configuration.

Physical Channel Modification:

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *UL DPCH Information* IE then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPCHs* IE (if it is included) in the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]
- [FDD – If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD – The Node B shall use the *TFCS* IE for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD – If the *UL DPCH Information* IE includes the *UL DPCCH Slot Format* IE, the Node B shall set the new Uplink DPCCH Structure to the new configuration.]
- [FDD - If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the Node B shall apply diversity according to the given value.]
- [FDD – If the *UL DPCH Information* IE includes an *SSDT Cell Identity Length* IE and/or an *S-Field Length* IE, the Node B shall apply the values in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information* IE then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – The Node B shall use the *TFCS* IE for the DL (if it is present) when reserving resources for the downlink of the new configuration. The Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE or the *TFCI Presence* IE, the Node B shall use the information when building TFCIs in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *DL DPCCH Slot Format* IE, group the Node B shall set the new Downlink DPCCH Structure to the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the Node B shall apply the indicated multiplexing type in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to 'Used', the Node B shall, if supported, use Limited Power Increase ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to 'Not Used', the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH code mapping* IE then the Node B shall apply the defined mapping between TFCI values and PDSCH channelisation codes.]
- [FDD – If the *DL DPCH Information* IE includes the *PDSCH RL ID* IE then the Node B shall infer that the PDSCH for the specified user will be transmitted on the defined radio link.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Modify* or *DL CCTrCH to Modify* IEs, then the Node B shall treat them each as follows:]

- [TDD – If the IE includes any of *TFCS* IE, *TFCI coding* IE or *Puncture Limit* IE the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]

- [TDD – If the IE includes any *UL DPCH to add* or *DL DPCH to add* IEs, the Node B shall include this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH to delete* or *DL DPCH to delete* IEs, the Node B shall remove this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH to modify* or *DL DPCH to modify* IEs, and includes any of *Repetition Period IE*, *Repetition Length IE*, or *TDD DPCH Offset IE* or the message includes *UL/DL Timeslot Information* and includes any of [*3.84Mcps TDD - Midamble shift and Burst Type IE*, *Time Slot IE*], [*1.28Mcps TDD - Midamble shift LCR IE*, *Time Slot LCR IE*], or *TFCI presence IE* or the message includes *UL/DL Code information* and includes [*3.84Mcps TDD - TDD Channelisation Code IE*], [*1.28Mcps TDD - TDD Channelisation Code LCR IE*], the Node B shall apply these specified information elements as the new values, otherwise the old values specified for this DPCH configuration are still applicable.]
- [1.28Mcps TDD – If the *UL CCTrCH to Modify IE* includes the *UL SIR Target IE*, the Node B shall use the value for the UL inner loop power control according [19] and [21] when the new configuration is being used.]

[TDD – UL/DL CCTrCH Addition]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Add IE* or *DL CCTrCH to Add IE*, the Node B shall include this CCTrCH in the new configuration.]

[TDD – If the *UL/DL CCTrCH to Add IE* includes any *UL/DL DPCH Information IE*, the Node B shall reserve necessary resources for the new configuration of the UL/DL DPCH(s) according to the parameters given in the message.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL CCTrCH to Add IE*, the Node B shall set the TPC step size of that CCTrCH to the same value as the lowest numbered DL CCTrCH in the current configuration.]

[1.28Mcps TDD – The Node B shall use the *UL SIR Target IE* in the *UL CCTrCH to Add IE* as the UL SIR value for the inner loop power control for this CCTrCH according [19] and [21] in the new configuration.]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any UL or DL CCTrCH to be deleted, the Node B shall remove this CCTrCH in the new configuration.]

DL Power Control:

- [FDD - If the *RL Information IE* includes the *DL Reference Power* IEs and the power balancing is active, Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported, at the CFN in the RADIO LINK RECONFIGURATION COMMIT message, according to subclause 8.3.7, using the *DL Reference Power IE*. If the CFN modulo the value of the *Adjustment Period IE* is not equal to 0, the power balancing continues with the old reference power until the end of the current adjustment period, and the updated reference power shall be used from the next adjustment period.

[FDD - If updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator IE* in the *RL Information Response IE* in the RADIO LINK RECONFIGURATION READY message.]

DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH to modify*, *DSCH to add* or *DSCH to delete* IEs, then the Node B shall use this information to add/modify/delete the indicated DSCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address IE* and the *Binding ID IE* for the transport bearer to be established for each DSCH.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Information IE* then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received if one does not already exist or shall apply the new values if such a bearer does already exist for this Node B communication context. The *Binding ID IE* and *Transport Layer Address IE* of any new bearer to be

set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message. If the RADIO LINK RECONFIGURATION PREPARE message specifies that the TFCI2 transport bearer is to be deleted then the Node B shall release the resources associated with that bearer in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Request Indicator IE* in the *TFCI2 Bearer Information IE* with the value "New Bearer Requested", the Node B shall, if supported, establish a new transport bearer replacing the existing transport bearer on which the DSCH TFCI Signalling control frames shall be received. The *Binding ID IE* and *Transport Layer Address IE* of a new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message.]

[FDD – If the *TFCI Signalling Mode IE* within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI field but a TFCI2 transport bearer has not already been set up and *TFCI2 Bearer Information IE* is not included in the message then the Node B shall transmit the TFCI2 field with zero power in the new configuration.]

[FDD – If the *TFCI Signalling Mode IE* within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information IE* is included in the message then the Node B shall transmit the TFCI2 field with zero power until Synchronisation is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer in the new configuration (see ref. [24]).]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Length of TFCI2 IE*, then the Node B shall apply the length of TFCI (field 2) indicated in the message in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Length of TFCI2 IE* and the *Split type IE* is present with the value "Hard", then the Node B shall assume the length of the TFCI (field 2) is 5 bits in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *DSCH Common Information IE*, the Node B shall treat it as follows:]

- [FDD - If the *Enhanced DSCH PC Indicator IE* is included and set to "Enhanced DSCH PC Active in the UE ", the Node B shall activate enhanced DSCH power control in accordance with ref. [10] subclause 5.2.2, if supported, using either:]
 - [FDD - the *SSDT Cell Identity for EDSCHPC IE* in the *RL Information IE*, if the *SSDT Cell Identity IE* is not included in the *RL Information IE* or]
 - [FDD - the *SSDT Cell Identity IE* in the *RL Information IE*, if both the *SSDT Cell Identity IE* and the *SSDT Cell Identity for EDSCHPC IE* are included in the *RL Information IE*.]

[FDD - together with the *SSDT Cell Identity Length IE* in *UL DPCH Information IE*, and *Enhanced DSCH PC IE*, in the new configuration.]

[FDD - If the enhanced DSCH power control is activated and the TFCI power control in DSCH hard split mode is supported, the primary/secondary status determination in the enhanced DSCH power control is also applied to the TFCI power control in DSCH hard split mode.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Enhanced DSCH PC Indicator IE* set to "Enhanced DSCH PC not Active in the UE", the Node B shall deactivate enhanced DSCH power control in the new configuration.]

[TDD – USCH Addition/Modification/Deletion:]

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]
- [TDD – The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address IE* and the *Binding ID IE* for the transport bearer to be established for each USCH.]

RL Information:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B may activate SSDT using the *SSDT Cell Identity* IE in the new configuration.]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the Node B shall deactivate SSDT in the new configuration.]
- [FDD – If the *RL Information* IE includes a *DL Code Information* IE, the Node B shall apply the values in the new configuration.]
- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- If the *RL Information* IE includes the *Maximum DL Power* and/or the *Minimum DL Power* IEs, the Node B shall apply the values in the new configuration. [FDD - During compressed mode, the $P_{SIR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k .]
- [TDD – If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial CCTrCH DL power for each CCTrCH by the following rule: If the *CCTrCH Initial DL transmission Power* IE is included for that CCTrCH then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL transmission Power* IE included in the *RL Information* IE. The Node B shall apply the determined initial CCTrCH DL power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu is achieved for the CCTrCH. If no *Initial DL Transmission power* IE is included with a new CCTrCH (even if *CCTrCH Initial DL transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing CCTrCH's when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]
- [FDD- If the *RL Information* IE includes the *DL DPCH Timing Adjustment* IE, the Node B shall adjust the timing of the radio link accordingly in the new configuration.]

Signalling bearer rearrangement:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Signalling Bearer Request Indicator* IE the Node B shall, if supported, allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION READY message.

HS-DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH Information to add* IE or *HS-DSCH Information to delete* IEs or *HS-DSCH Information to modify* IE, then the Node B shall use this information to add/modify/delete the indicated HS-DSCH channel to/from the radio link.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-PDSCH RL ID* IE, then the Node B shall configure the HS-PDSCH in the radio link indicated by this IE, while removing any existing HS-PDSCH resources from other radio links associated with the Node B Communication Context.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH-RNTI* IE, then the Node shall use the HS-DSCH-RNTI for the Node B Communication Context.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH Information to delete* IE requesting the deletion of certain HS-DSCH resources for the Node B Communication Context, the Node B shall remove the indicated HS-DSCH in the new configuration.

General

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address* IE and *Binding ID* IEs in the *DSCHs to Modify*, *DSCHs to Add*, [TDD - *USCHs to Modify*, *USCHs to Add*] or in the *RL Specific DCH Information* IEs, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exist a Prepared Reconfiguration, as defined in subclause 3.1.

In the RADIO LINK RECONFIGURATION READY message, the Node B shall include the *RL Information Response* IE for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the Transport Layer Address and the Binding ID for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In case of a DCH requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* shall be included in the *IE DCH Information Response* IE.

In case of a set of coordinated DCHs requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the DCH in the set of coordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the Node B, the *RL Information Response* IE shall be included only for one of the combined RLs. The *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

8.3.6 Radio Link Deletion

8.3.6.1 General

The Radio Link Deletion procedure is used to release the resources in a Node B for one or more established radio links towards a UE.

The Radio Link Deletion procedure may be initiated by the CRNC at any time when the Node B Communication Context exists.

8.3.6.2 Successful Operation

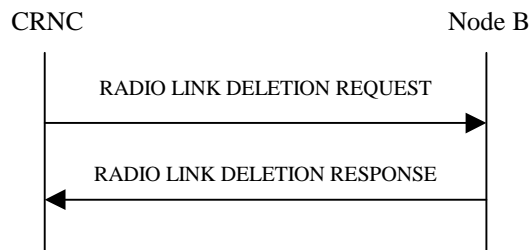


Figure 36: Radio Link Deletion procedure, Successful Operation

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the CRNC to the Node B.

Upon receipt of this message, the Node B shall delete the radio link(s) identified by the *RL ID IE*, *Node B Communication ID IE* and *CRNC Communication ID IE* and release all associated resources and respond to the CRNC with a RADIO LINK DELETION RESPONSE message. [FDD - Resources associated with the TFCI2 bearer shall be released only if all the RLs in the Node B communication context are deleted].

[FDD – After deletion of the RL(s), the UL out-of-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the maximum value of the parameters *N_OUTSYNC_IND* and *T_RLFAILURE*, and the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells supporting the radio links of the RL Set].

9.1.38 RADIO LINK SETUP FAILURE

9.1.38.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	C-Success		9.2.1.48	The reserved value "All NBCC" shall not be used	YES	ignore
Communication Control Port ID	O		9.2.1.15		YES	ignore
CHOICE <i>Cause Level</i>	M				YES	ignore
> <i>General</i>					–	
>> <i>Cause</i>	M		9.2.1.6		–	
> <i>RL specific</i>					–	
>> Unsuccessful RL Information Response		1 to <maxnoo fRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>> Successful RL Information Response		0 to <maxnoo fRLs–1>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>RL Set ID	M		9.2.2.39			
>>>Received total wide band power	M		9.2.2.39A		–	
>>>Diversity Indication	C-NotFirstRL		9.2.1.26		–	
>>>CHOICE <i>Diversity Indication</i>	M				–	
>>>> <i>Combining</i>					–	
>>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	–	
>>>> <i>Non Combining or First RL</i>					–	
>>>>DCH Information Response	M		9.2.1.20C		-	
>>>DSCH Information Response	O		9.2.1.27A		YES	ignore
>>>TFCI2 Bearer Information Response	O		9.2.2.49A	<u>There shall be only one TFCI2 bearer per Node B communication context.</u>	-	

>>>SSDT Support Indicator	M		9.2.2.46		-	
>>>DL Power Balancing Activation Indicator	O		9.2.2.12C		YES	ignore
>>>HS-DSCH Information Response	O		HS-DSCH FDD Information Response 9.2.2.18E		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.1.43 RADIO LINK RECONFIGURATION READY

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information Response		<i>0..<max noofRLs ></i>		Only one RL information response group for one group of combined RLs shall be present	EACH	ignore
>RL ID	M		9.2.1.53		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29	TDD only	YES	ignore
>TFCI2 Bearer Information Response	O		9.2.2.49A	FDD only. <u>There shall be only one TFCI2 bearer per Node B communication context.</u>	–	
>DL Power Balancing Updated Indicator	O		9.2.2.12D		YES	ignore
>HS-DSCH FDD Information Response	O		9.2.2.18E		YES	ignore
>HS-DSCH TDD Information Response	O		9.2.318E		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore
Target Communication Control Port ID	O		9.2.1.15		YES	ignore

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for NBAP.
--
-- *****
```

```
***** UNCHANGED PART OMITTED *****
```

```
-- *****
--
-- RADIO LINK SETUP FAILURE FDD
--
-- *****
```

```
RadioLinkSetupFailureFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{RadioLinkSetupFailureFDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}}
    ...
}

RadioLinkSetupFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID
    CommunicationContextID PRESENCE mandatory }|
    { ID id-NodeB-CommunicationContextID
    CommunicationContextID PRESENCE conditional }|
    -- This IE shall be present if at least one of the radio links has been successfully set up
    { ID id-CommunicationControlPortID
    CommunicationControlPortID PRESENCE optional }|
    { ID id-CauseLevel-RL-SetupFailureFDD
    SetupFailureFDD PRESENCE mandatory }|
    { ID id-CriticalityDiagnostics
    CriticalityDiagnostics PRESENCE optional },
    ...
}
```

```

}

RadioLinkSetupFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CauseLevel-RL-SetupFailureFDD ::= CHOICE {
  generalCause      GeneralCauseList-RL-SetupFailureFDD,
  rLSpecificCause   RLSpecificCauseList-RL-SetupFailureFDD,
  ...
}

GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE {
  cause              Cause,
  iE-Extensions     ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
  ...
}

GeneralCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
  unsuccessful-RL-InformationRespList-RL-SetupFailureFDD      Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD,
  successful-RL-InformationRespList-RL-SetupFailureFDD        Successful-RL-InformationRespList-RL-SetupFailureFDD OPTIONAL,
  iE-Extensions                                               ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
  ...
}

RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}

Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID      id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD      CRITICALITY      ignore      TYPE      Unsuccessful-RL-
InformationRespItem-RL-SetupFailureFDD      PRESENCE      mandatory}
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID          RL-ID,
  cause          Cause,
  iE-Extensions ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs } }
  OPTIONAL,
  ...
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```



```

Successful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1.. maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}

Successful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID      id-Successful-RL-InformationRespItem-RL-SetupFailureFDD          CRITICALITY      ignore          TYPE      Successful-RL-
InformationRespItem-RL-SetupFailureFDD          PRESENCE      mandatory}
}

Successful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID                RL-ID,
  rL-Set-ID            RL-Set-ID,
  received-total-wide-band-power          Received-total-wide-band-power-Value,
  diversityIndication          DiversityIndication-RL-SetupFailureFDD,
  -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
  -- the tabular message format in subclause 9.1.
  dSCH-InformationResponseList          DSCH-InformationRespList-RL-SetupFailureFDD          OPTIONAL,
  tFCI2-BearerInformationResponse          TFCI2-BearerInformationResponse          OPTIONAL,
  -- There shall be only one TFCI2 bearer per Node B communication context.
  sSDT-SupportIndicator          SSDT-SupportIndicator,
  iE-Extensions          ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
  OPTIONAL,
  ...
}

```

***** UNCHANGED PART OMITTED *****

```

-- *****
--
-- RADIO LINK RECONFIGURATION READY
--
-- *****

RadioLinkReconfigurationReady ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{RadioLinkReconfigurationReady-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationReady-Extensions}}      OPTIONAL,
    ...
}

RadioLinkReconfigurationReady-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID          CRITICALITY  ignore    TYPE          CRNC-CommunicationContextID
      PRESENCE  mandatory } |
    { ID    id-RL-InformationResponseList-RL-ReconfReady  CRITICALITY  ignore    TYPE          RL-InformationResponseList-RL-
ReconfReady  PRESENCE  optional } |
    { ID    id-CriticalityDiagnostics              CRITICALITY  ignore    TYPE          CriticalityDiagnostics
      PRESENCE  optional },
    ...
}

RadioLinkReconfigurationReady-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TargetCommunicationControlPortID  CRITICALITY ignore  EXTENSION  CommunicationControlPortID          PRESENCE optional },
    ...
}

RL-InformationResponseList-RL-ReconfReady ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-RL-
ReconfReady}}

RL-InformationResponseItemIE-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    { ID    id-RL-InformationResponseItem-RL-ReconfReady          CRITICALITY  ignore          TYPE  RL-InformationResponseItem-
RL-ReconfReady  PRESENCE  mandatory}
}

RL-InformationResponseItem-RL-ReconfReady ::= SEQUENCE {
    rL-ID          RL-ID,
    dCH-InformationResponseList-RL-ReconfReady  DCH-InformationResponseList-RL-ReconfReady  OPTIONAL,
    dSCH-InformationResponseList-RL-ReconfReady  DSCH-InformationResponseList-RL-ReconfReady  OPTIONAL,
    uSCH-InformationResponseList-RL-ReconfReady  USCH-InformationResponseList-RL-ReconfReady  OPTIONAL,
    tFCI2-BearerInformationResponse  TFCI2-BearerInformationResponse  OPTIONAL,
    --FDD only. There shall be only one TFCI2 bearer per Node B communication context.
    iE-Extensions  ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfReady-ExtIEs} }      OPTIONAL,
    ...
}

```

CHANGE REQUEST

⌘ **25.433 CR 702** ⌘ rev **-** ⌘ Current version: **3.9.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ NBAP Review – Alignment of the ASN.1		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May 2002
Category:	⌘ F	Release:	⌘ R99
	<i>Use <u>one</u> of the following categories:</i> F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.		<i>Use <u>one</u> of the following releases:</i> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change: ⌘ The ASN.1 description needs to be aligned to the tabular format in some places to respect the intention of the specification

Summary of change: ⌘ This CR corrects the ASN.1 description in the following cases:

9.3.3:

- In CELL RECONFIGURATION REQUEST TDD message, the type of the "pCCPCH-Power" IE in the "PCCPCH-Information-Cell-ReconfRqstTDD" IE is corrected from "DL-Power" to "PCCPCH-Power". => Isolated impact correction (but non backward compatible).
- In RADIO LINK RECONFIGURATION REQUEST TDD message, the criticality of the "id-RL-Information-RL-ReconfRqstTDD" IE has been corrected to "reject". This is in line with the tabular format and the intention of the specification (i.e. consistent with the criticality for this IE in the RADIO LINK RECONFIGURATION PREPARE TDD message).
- In PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message:
 - The "DL-Code-InformationAddList-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfULTSs" in the ASN.1 and "maxnoofPDSCHs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.
 - The "UL-Code-InformationAddList-PSCH-ReconfRqst" is defined as a sequence between 1 and "maxNrOfPDSCHs" in the ASN.1 and "maxnoofPUSCHs" in the tabular format. The tabular format is correct, the ASN.1 is aligned.

Impact Analysis:
Impact assessment towards the previous version of the specification (same

release): this CR has impact on the previous version of the specification (same release) under the protocol point of view as the ASN.1 is modified for the Cell Reconfiguration, the Unsynchronised Radio Link Reconfiguration and the Physical Shared Channel Reconfiguration procedures.

Consequences if not approved: ⌘ If this CR is not approved, then the erroneous ASN.1 will remain as it is in the specification.

Clauses affected: ⌘ 9.3.3

Other specs affected:

<input checked="" type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘ TS 25.433 v 4.4.0 CR 672 TS 25.433 v 5.0.0 CR 673
--------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------

Other comments: ⌘

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for NBAP.
--
-- *****
```

```
NBAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }
```

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- CELL RECONFIGURATION REQUEST TDD
--
-- *****
```

```
CellReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellReconfigurationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellReconfigurationRequestTDD-Extensions}} OPTIONAL,
    ...
}
```

```
CellReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
{ ID id-C-ID          CRITICALITY reject TYPE C-ID          PRESENCE
mandatory }|
{ ID id-ConfigurationGenerationID CRITICALITY reject TYPE ConfigurationGenerationID PRESENCE
mandatory }|
{ ID id-Synchronisation-Configuration-Cell-ReconfRqst CRITICALITY reject TYPE Synchronisation-Configuration-Cell-ReconfRqst
PRESENCE optional }|
{ ID id-TimingAdvanceApplied CRITICALITY reject TYPE TimingAdvanceApplied PRESENCE
optional }|
{ ID id-SCH-Information-Cell-ReconfRqstTDD CRITICALITY reject TYPE SCH-Information-Cell-ReconfRqstTDD
PRESENCE optional }|
{ ID id-PCCPCH-Information-Cell-ReconfRqstTDD CRITICALITY reject TYPE PCCPCH-Information-Cell-ReconfRqstTDD
PRESENCE optional }|
{ ID id-MaximumTransmissionPower CRITICALITY reject TYPE MaximumTransmissionPower PRESENCE
optional }|
{ ID id-DPCHConstant CRITICALITY reject TYPE ConstantValue PRESENCE
optional }|
{ ID id-PUSCHConstant CRITICALITY reject TYPE ConstantValue PRESENCE
optional }|
{ ID id-PRACHConstant CRITICALITY reject TYPE ConstantValue PRESENCE
optional }|
```

```

    { ID      id-TimeSlotConfigurationList-Cell-ReconfRqstTDD      CRITICALITY      reject      TYPE      TimeSlotConfigurationList-Cell-ReconfRqstTDD
      PRESENCE      mandatory      },
    ...
}

```

```

CellReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

SCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    sCH-Power                      DL-Power,
    iE-Extensions                  ProtocolExtensionContainer { { PSCH-Information-Cell-ReconfRqstTDD-ExtIEs } }      OPTIONAL,
    ...
}

```

```

PSCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

PCCPCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    pCCPCH-Power                  DL-PCCPCH-Power,
    iE-Extensions                  ProtocolExtensionContainer { { PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs } }      OPTIONAL,
    ...
}

```

```

PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

TimeSlotConfigurationList-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-ReconfRqstTDD

```

```

TimeSlotConfigurationItem-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlot                      TimeSlot,
    timeSlotStatus                  TimeSlotStatus,
    timeSlotDirection              TimeSlotDirection,
    iE-Extensions                  ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs } }      OPTIONAL,
    ...
}

```

```

TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- *****

```

```

RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{RadioLinkReconfigurationRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{RadioLinkReconfigurationRequestTDD-Extensions}}  OPTIONAL,
    ...
}

RadioLinkReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-NodeB-CommunicationContextID          CRITICALITY    reject          TYPE    NodeB-CommunicationContextID
      PRESENCE  mandatory } |
    { ID      id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD  CRITICALITY    notify          TYPE    UL-CCTrCH-InformationModifyList-RL-
      ReconfRqstTDD      PRESENCE  optional } |
    { ID      id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD  CRITICALITY    notify          TYPE    UL-CCTrCH-InformationDeleteList-RL-
      ReconfRqstTDD      PRESENCE  optional } |
    { ID      id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD  CRITICALITY    notify          TYPE    DL-CCTrCH-InformationModifyList-RL-
      ReconfRqstTDD      PRESENCE  optional } |
    { ID      id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD  CRITICALITY    notify          TYPE    DL-CCTrCH-InformationDeleteList-RL-
      ReconfRqstTDD      PRESENCE  optional } |
    { ID      id-TDD-DCHs-to-Modify          CRITICALITY    reject          TYPE    TDD-DCHs-to-Modify          PRESENCE optional } |
      { ID      id-DCHs-to-Add-TDD          CRITICALITY    reject          TYPE    DCH-TDD-Information          PRESENCE
      optional } |
    { ID      id-DCH-DeleteList-RL-ReconfRqstTDD          CRITICALITY    reject          TYPE    DCH-DeleteList-RL-ReconfRqstTDD
      PRESENCE  optional } |
    { ID      id-RL-Information-RL-ReconfRqstTDD          CRITICALITY    rejectignore          TYPE    RL-Information-RL-ReconfRqstTDD
      PRESENCE  optional },
    ...
}

RadioLinkReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD          CRITICALITY    notify          TYPE    UL-CCTrCH-InformationModifyItem-RL-
      ReconfRqstTDD      PRESENCE  mandatory}
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCtTrCH-ID          CCTrCH-ID,
    tFCS                TFCS          OPTIONAL,
    punctureLimit       PunctureLimit  OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer  { { UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID      id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD      CRITICALITY      notify      TYPE      UL-CCTrCH-InformationDeleteItem-RL-
ReconfRqstTDD      PRESENCE      mandatory}
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCCTrCH-ID      CCTrCH-ID,
  iE-Extensions      ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs} }
  OPTIONAL,
  ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID      id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD      CRITICALITY      notify      TYPE      DL-CCTrCH-InformationModifyItem-RL-
ReconfRqstTDD      PRESENCE      mandatory}
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCCTrCH-ID      CCTrCH-ID,
  tFCS      TFCS      OPTIONAL,
  punctureLimit      PunctureLimit      OPTIONAL,
  iE-Extensions      ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} }
  OPTIONAL,
  ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID      id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD      CRITICALITY      notify      TYPE      DL-CCTrCH-InformationDeleteItem-RL-
ReconfRqstTDD      PRESENCE      mandatory}
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCCTrCH-ID      CCTrCH-ID,
  iE-Extensions      ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs} }
  OPTIONAL,
  ...
}

```



```

}

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-DeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD

DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
  dCH-ID                DCH-ID,
  iE-Extensions         ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs} }  OPTIONAL,
  ...
}

DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Information-RL-ReconfRqstTDD ::= SEQUENCE {
  rL-ID                RL-ID,
  maxDL-Power          DL-Power          OPTIONAL,
  minDL-Power          DL-Power          OPTIONAL,
  iE-Extensions         ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstTDD-ExtIEs} }  OPTIONAL,
  ...
}

RL-InformationItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****
```

```
PhysicalSharedChannelReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container {{PhysicalSharedChannelReconfigurationRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestTDD-Extensions}} OPTIONAL,
    ...
}
```

```
PhysicalSharedChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY reject          TYPE C-ID          PRESENCE
      mandatory } |
    { ID id-SFN          CRITICALITY reject          TYPE SFN          PRESENCE
      optional } |
    { ID id-PDSCHSets-AddList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-AddList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PDSCHSets-ModifyList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-ModifyList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PDSCHSets-DeleteList-PSCH-ReconfRqst CRITICALITY reject          TYPE PDSCHSets-DeleteList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PUSCHSets-AddList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-AddList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PUSCHSets-ModifyList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-ModifyList-PSCH-ReconfRqst PRESENCE
      optional } |
    { ID id-PUSCHSets-DeleteList-PSCH-ReconfRqst CRITICALITY reject          TYPE PUSCHSets-DeleteList-PSCH-ReconfRqst PRESENCE
      optional },
    ...
}
```

```
PhysicalSharedChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
PDSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-AddItem-PSCH-ReconfRqst
```

```
PDSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID          PDSCHSet-ID,
    pDSCH-InformationList PDSCH-Information-AddList-PSCH-ReconfRqst,
    iE-Extensions        ProtocolExtensionContainer { {PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}
```

```
PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
PDSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-AddListIEs-PSCH-ReconfRqst }}
```

```
PDSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
```

```

    {ID id-PDSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE
      mandatory}
  }

PDSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  dL-Timeslot-InformationAddList-PSCH-ReconfRqst DL-Timeslot-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions             ProtocolExtensionContainer { {PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-Timeslot-InformationAddItem-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlot          TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType,
  tFCI-Presence     TFCI-Presence,
  dL-Code-InformationAddList-PSCH-ReconfRqst DL-Code-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions             ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSPSPDSCHS)) OF DL-Code-InformationAddItem-PSCH-ReconfRqst

DL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  pDSCH-ID          PDSCH-ID,
  tdd-ChannelisationCode TDD-ChannelisationCode,
  iE-Extensions     ProtocolExtensionContainer { { DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PDSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-ModifyItem-PSCH-ReconfRqst

PDSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  pDSCHSet-ID          PDSCHSet-ID,
  pDSCH-InformationList PDSCH-Information-ModifyList-PSCH-ReconfRqst,
  iE-Extensions       ProtocolExtensionContainer { {PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

```

```

PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PDSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst } }

PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
  {ID id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-ModifyItem-PSCH-ReconfRqst
  PRESENCE mandatory}
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod OPTIONAL,
  repetitionLength RepetitionLength OPTIONAL,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
  dl-Timeslot-InformationModifyList-PSCH-ReconfRqst DL-Timeslot-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlot TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
  tFCI-Presence TFCI-Presence OPTIONAL,
  dl-Code-InformationModifyList-PSCH-ReconfRqst DL-Code-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
  ...
}

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  pDSCH-ID PDSCH-ID,
  tdd-ChannelisationCode TDD-ChannelisationCode,
  iE-Extensions ProtocolExtensionContainer { { DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
  ...
}

DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

PDSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-DeleteItem-PSCH-ReconfRqst

PDSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID                PDSCHSet-ID,
    iE-Extensions              ProtocolExtensionContainer { {PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-AddItem-PSCH-ReconfRqst

PUSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID                PUSCHSet-ID,
    pUSCH-InformationList      PUSCH-Information-AddList-PSCH-ReconfRqst,
    iE-Extensions              ProtocolExtensionContainer { {PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-AddListIEs-PSCH-ReconfRqst }}

PUSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE
    mandatory}
}

PUSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod           RepetitionPeriod,
    repetitionLength           RepetitionLength,
    tdd-PhysicalChannelOffset  TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-PSCH-ReconfRqst UL-Timeslot-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions              ProtocolExtensionContainer { {PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-PSCH-ReconfRqst

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                   TimeSlot,
    midambleShiftAndBurstType  MidambleShiftAndBurstType,
    tFCI-Presence              TFCI-Presence,
    uL-Code-InformationAddList-PSCH-ReconfRqst UL-Code-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions              ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
}

```

```

}
...
}
UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
UL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationAddItem-PSCH-ReconfRqst
UL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions           ProtocolExtensionContainer { { UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}
UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
PUSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-ModifyItem-PSCH-ReconfRqst
PUSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID            PUSCHSet-ID,
    pUSCH-InformationList  PUSCH-Information-ModifyList-PSCH-ReconfRqst,
    iE-Extensions          ProtocolExtensionContainer { { PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}
PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
PUSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}
PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst  CRITICALITY reject      TYPE      PUSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE      mandatory}
}
PUSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod          OPTIONAL,
    repetitionLength      RepetitionLength          OPTIONAL,
    tdd-PhysicalChannelOffset  TDD-PhysicalChannelOffset      OPTIONAL,
    uL-Timeslot-InformationModifyList-PSCH-ReconfRqst  UL-Timeslot-InformationModifyList-PSCH-ReconfRqst  OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}
PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

UL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType  MidambleShiftAndBurstType  OPTIONAL,
    tFCI-Presence            TFCI-Presence  OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst  UL-Code-InformationModifyList-PSCH-ReconfRqst  OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }  OPTIONAL,
    ...
}

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions            ProtocolExtensionContainer { { UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }  OPTIONAL,
    ...
}

UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-DeleteItem-PSCH-ReconfRqst

PUSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID            PUSCHSet-ID,
    iE-Extensions            ProtocolExtensionContainer { { PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs } }  OPTIONAL,
    ...
}

PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```