TSG-RAN Meeting #12
Stockholm, Sweden, 12 - 15 June 2001

TSGRP#12(01) 0384

Title: **Agreed CRs to TS 25.433**

Source: **TSG-RAN WG3**

Agenda item: **8.3.3/8.3.4**

Tdoc_Num	Specification	CR_Num	Revision_Num	CR_Subject	CR_Category	WG_Status	Cur_Ver_Num	New_Ver_Num	Workitem
R3-011408	25.433	411		Correction to the range of Successful RL Information in the RADIO LINK ADDITION FAILURE	F	agreed	3.5.0	3.6.0	TEI
R3-011409	25.433	412		Correction to the range of Successful RL Information in the RADIO LINK ADDITION FAILURE	A	agreed	4.0.0	4.1.0	TEI
R3-011664	25.433	420	1	Clarification on the System Information Update procedure (Information Element Functional Definition)	F	agreed	3.5.0	3.6.0	TEI
R3-011665	25.433	421	1	Clarification on the System Information Update procedure (Information Element Functional Definition)	A	agreed	4.0.0	4.1.0	TEI
R3-011806	25.433	422	1	Node B resources model at common transport channel reconfiguration	F	agreed	3.5.0	3.6.0	TEI
R3-011807	25.433	423	1	Node B resources model at common transport channel reconfiguration	A	agreed	4.0.0	4.1.0	TEI
R3-011659	25.433	426	1	Correction of the text for ToAWE IE	F	agreed	3.5.0	3.6.0	TEI
R3-011660	25.433	427	1	Correction of the text for ToAWE IE	A	agreed	4.0.0	4.1.0	TEI
R3-011459	25.433	430		Corrections on Dedicated Measurement Initiation Request message	F	agreed	3.5.0	3.6.0	TEI
R3-011460	25.433	431		Corrections on Dedicated Measurement Initiation Request message	A	agreed	4.0.0	4.1.0	TEI
R3-011461	25.433	432		Clarification to the Common Transport Channel Setup procedure	F	agreed	3.5.0	3.6.0	TEI
R3-011462	25.433	433		Clarification to the Common Transport Channel Setup procedure	A	agreed	4.0.0	4.1.0	TEI

R3-011487	25.433	436		Misalignment between tabular Format and ASN.1 in NBAP	F	agreed	3.5.0	3.6.0	TEI
R3-011488	25.433	437		Misalignment between tabular Format and ASN.1 in NBAP	A	agreed	4.0.0	4.1.0	TEI
R3-011710	25.433	438	1	Initial DL Power After addition of CCTrCH in Synchronised Reconfiguration	F	agreed	3.5.0	3.6.0	TEI
R3-011711	25.433	439	1	Initial DL Power After addition of CCTrCH in Synchronised Reconfiguration	A	agreed	4.0.0	4.1.0	TEI
R3-011681	25.433	440	1	Correction of TDD DL TPC Step Size After addition of CCTrCH in Synchronised Reconfiguration	F	agreed	3.5.0	3.6.0	TEI
R3-011498	25.433	441		Correction of TDD DL TPC Step Size After addition of CCTrCH in Synchronised Reconfiguration	A	agreed	4.0.0	4.1.0	TEI
R3-011503	25.433	442		Order of elements in Bitstrings	F	agreed	3.5.0	3.6.0	TEI
R3-011504	25.433	443		Order of elements in Bitstrings	A	agreed	4.0.0	4.1.0	TEI

3GPP TSG- Working Group 3 Meeting #21
Busan, Korea, 21st – 25th May

Tdoc R3-011408

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **411** ⌘ rev ⌘ Current version: **3.5.0** ⌘

*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 [X] Core Network ☐

Title:	⌘	Correction to the range of Successful RL Information in the RADIO LINK ADDITION FAILURE
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May 2001
Category:	⌘	**F**
Release:	⌘	R99

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 repetition range of *Successful RL Information Response* IE in the RADIO LINK ADDITION FAILURE shall start at 0.
Summary of change:	⌘	The minimum bound of "Successful RL Information Response" IE in the RADIO LINK ADDITION FAILURE is changed to 0.
Consequences if not approved:	⌘	Minimum bound in ASN.1 is not aligned with tabular format. Backward compatibility: This CR is backward compatible since *Successful RL Information Response* IE is defined as an optional in the ASN.1.

Clauses affected:	⌘	9.1.41.1
Other specs affected:	⌘	☐ Other core specifications ☐ Test specifications ☐ 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.

9.1.41 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
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 *cause level*	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.6		–	
>RL specific					–	
>>Unsuccessful RL Information Response		1..*<maxnoofRL-1>*			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>>Succcessful RL Information Response		~~1~~0..*<maxnoofRL-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 bound	Explanation
MaxnoofRL	Maximum number of RLs for one UE

3GPP TSG- Working Group 3 Meeting #21
Busan, Korea, 21st – 25th May

Tdoc R3-011409

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **412** ⌘ rev ⌘ Current version: **4.0.0** ⌘

*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 [X] Core Network ☐

Title:	⌘	Correction to the range of Successful RL Information in the RADIO LINK ADDITION FAILURE
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May 2001
Category:	⌘	**A**
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 repetition range of *Successful RL Information Response* IE in the RADIO LINK ADDITION FAILURE shall start at 0.
Summary of change:	⌘	The minimum bound of "Successful RL Information Response" IE in the RADIO LINK ADDITION FAILURE is changed to 0.
Consequences if not approved:	⌘	Minimum bound in ASN.1 is not aligned with tabular format. Backward compatibility: This CR is backward compatible since *Successful RL Information Response* IE is defined as an optional in the ASN.1.

Clauses affected:	⌘	9.1.41.1
Other specs affected:	⌘	☐ Other core specifications ☐ Test specifications ☐ 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.

9.1.41 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
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 *cause level*	M				YES	Ignore
>General					–	
>>Cause	M		9.2.1.6		–	
>RL specific					–	
>>Unsuccessful RL Information Response		1..*<maxnoofRL-1>*			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>>Succcessful RL Information Response		~~1~~0..*<maxnoofRL-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 bound	Explanation
MaxnoofRL	Maximum number of RLs for one UE

3GPP TSG-RAN WG3 Meeting #21 ***R3-011664***
Busan, Korea, 21st – 25th May, 2001.

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **420** ⌘ rev **1** ⌘ Current version: **3.5.0** ⌘

*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 the System Information Update procedure (Information Element Functional Definition)
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May, 2001
Category:	⌘	**F**
Release:	⌘	R99

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 definition of the IB_SG_POS parameter in the NBAP SYSTEM INFORMATION UPDATE REQUEST is not clear and can lead to implementations that are not interoperable.
Summary of change:	⌘	The definition of the IB_SG_POS parameter in the SYSTEM INFORMATION UPDATE REQUEST message should be changed as follows: "IB_SG_POS is the position of an Information Block segment in the SFN cycle (IB_SG_POS < IB_SG_REP)." R1: the definition of IB_SG_POS was previously proposed was replaced by 'IB_SG_POS is the lowest position of a specific SIB segment in the SFN cycle (…)'. Minor corrections were also performed. It was stated in the summary of change (here) that the inclusion of IB_SG_POS is mandated in the Information Block Addition. This CR is backward compatible with the previous version of the specification.
Consequences if not approved:	⌘	If this CR is not approved, system information updates will lead to non interoperable implementations

Clauses affected:	⌘	8.2.16.2.1, 9.2.1.33		
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	25.433, CR 421, Rel-4;
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.

8.2.16 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 content to the system information segments broadcast on the BCCH.

8.2.16.2 Successful Operation

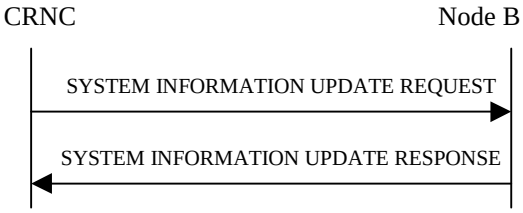

Figure 22: System Information Update procedure, Successful Operation

The procedure is initiated with a SYSTEM INFORMATION UPDATE REQUEST message sent from the CRNC to the Node B.

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 content updates) indicated in the SYSTEM INFORMATION UPDATE REQUEST message shall be applied by 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 ~~is~~ 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 mod 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 the *IB Deletion Indicator* IE value is set to 'Deletion' 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

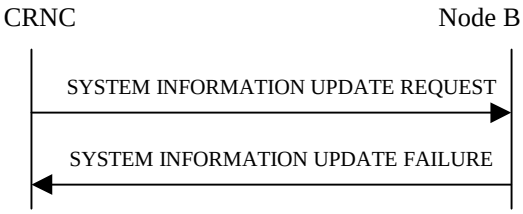

Figure 23: System Information Update procedure: Unsuccessful Operation

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.

Node B shall reject, with cause value 'SIB origination in Node B not supported', requests for Node B originated system information blocks that make use of a value tag.

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 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 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 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;

Possible cause values are:

Radio Network Layer Cause

- Unknown C-ID
- SIB Origination in Node B not Supported
- BCCH scheduling error

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

-

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 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.

9.2.1 Common parameters

9.2.1.33 IB_SG_POS

~~First~~ The lowest position of a~~n~~ 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 allowed. See ref. [18]

3GPP TSG-RAN WG3 Meeting #21 **R3-011665**

Busan, Korea, 21st – 25th May, 2001.

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **421** ⌘ rev **1** ⌘ Current version: **4.0.0** ⌘

*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 the System Information Update procedure (Information Element Functional Definition)
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May, 2001
Category:	⌘	**A**
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 definition of the IB_SG_POS parameter in the NBAP SYSTEM INFORMATION UPDATE REQUEST is not clear and can lead to implementations that are not interoperable
Summary of change:	⌘	The definition of the IB_SG_POS parameter in the SYSTEM INFORMATION UPDATE REQUEST message should be changed as follows: "IB_SG_POS is the position of an Information Block segment in the SFN cycle (IB_SG_POS < IB_SG_REP)." R1: the definition of IB_SG_POS was previously proposed was replaced by 'IB_SG_POS is the lowest position of a specific SIB segment in the SFN cycle (…)'. Minor corrections were also performed. It was stated in the summary of change (here) that the inclusion of IB_SG_POS is mandated in the Information Block Addition. This CR is backward compatible with the previous version of the specification.
Consequences if not approved:	⌘	If this CR is not approved, system information updates will lead to non interoperable implementations

Clauses affected:	⌘	8.2.16.2.1, 9.2.1.33		
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	25.433, CR 420 Rel 99
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.

8.2.16 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 content to the system information segments broadcast on the BCCH.

8.2.16.2 Successful Operation

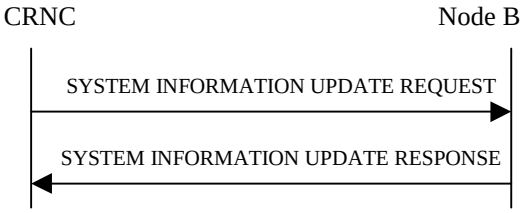

Figure 22: System Information Update procedure, Successful Operation

The procedure is initiated with a SYSTEM INFORMATION UPDATE REQUEST message sent from the CRNC to the Node B.

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 content updates) indicated in the SYSTEM INFORMATION UPDATE REQUEST message shall be applied by 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 ~~is~~ 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 mod 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 the *IB Deletion Indicator* IE value is set to 'Deletion' 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

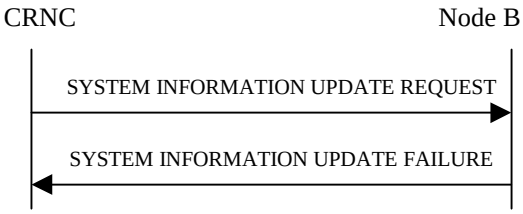

Figure 23: System Information Update procedure: Unsuccessful Operation

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.

Node B shall reject, with cause value ‘SIB origination in Node B not supported’, requests for Node B originated system information blocks that make use of a value tag.

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 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 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 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;

Possible cause values are:

Radio Network Layer Cause

- Unknown C-ID
- SIB Origination in Node B not Supported
- BCCH scheduling error

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

-

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 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.

9.2.1 Common parameters

9.2.1.33 IB_SG_POS

~~First~~ The lowest position of a~~n~~ 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 allowed. See ref. [18]

3GPP TSG-RAN3 Meeting #21 ***Tdoc R3-011806***

Busan, Korea, 21/05/2001 - 25/05/2001

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **422** ⌘ rev **1** ⌘ Current version: **3.5.0** ⌘

*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:	⌘	Node B resources model at common transport channel reconfiguration
Source:	⌘	R-WG3
Work item code:	⌘	*TEI*
Date:	⌘	20-05-2001
Category:	⌘	**F**
Release:	⌘	R99

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:	⌘	In FDD, The Capacity Credit must be updated with the procedure 'Common Transport Channel Reconfiguration' since this procedure may change the possible PRACH slot formats and therefore the minimum possible PRACH spreading factor that is used to determine the credit reserved for PRACH.
Summary of change:	⌘	In FDD, the 'common transport channel reconfiguration' procedure has been added to the list of procedure for which the common channel capacity consumption law must be used.
Consequences if not approved:	⌘	The call admission control implemented in the CRNC and that relies on the credit mechanism will not work properly since the costs could be not interpreted the same way by the Node B and the CRNC. This CR is backward compatible with the referenced version of NBAP unless misinterpretation due to previous ambiguity.

Clauses affected:	⌘	9.2.1.9A		
Other specs affected:	⌘	☐ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	CR423r1 TS25.433 v4.0.0
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.

9.2.1.9A Common Channels Capacity Consumption Law

The capacity consumption law indicates 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' 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, ~~or~~ 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		<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	M		INTEGER (0..65535)	
>UL cost	M		INTEGER (0..65535)	

Range bound	Explanation
MaxNumberOfSF	Maximum number of Spreading Factors

3GPP TSG-RAN3 Meeting #21 ***Tdoc R3-011807***

Busan, Korea, 21/05/2001 - 25/05/2001

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **423** ⌘ rev **1** ⌘ Current version: **4.0.0** ⌘

*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:	⌘	Node B resources model at common transport channel reconfiguration
Source:	⌘	R-WG3
Work item code:	⌘	***TEI***
Date:	⌘	20-05-2001
Category:	⌘	**A**
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:	⌘	In FDD, The Capacity Credit must be updated with the procedure 'Common Transport Channel Reconfiguration' since this procedure may change the possible PRACH slot formats and therefore the minimum possible PRACH spreading factor that is used to determine the credit reserved for PRACH.
Summary of change:	⌘	In FDD, the 'common transport channel reconfiguration' procedure has been added to the list of procedure for which the common channel capacity consumption law must be used.
Consequences if not approved:	⌘	The call admission control implemented in the CRNC and that relies on the credit mechanism will not work properly since the costs could be not interpreted the same way by the Node B and the CRNC. This CR is backward compatible with the referenced version of NBAP unless misinterpretation due to previous ambiguity.

Clauses affected:	⌘	9.2.1.9A		
Other specs affected:	⌘	☐ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	CR 422r1 TS25.433 v3.5.0
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.

9.2.1.9A Common Channels Capacity Consumption Law

The capacity consumption law indicates 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' 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, ~~or~~ 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		<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	M		INTEGER (0..65535)	
>UL cost	M		INTEGER (0..65535)	

Range bound	Explanation
MaxNumberOfSF	Maximum number of Spreading Factors

3GPP TSG-RAN WG3 Meeting #21
Busan, Korea, May 21st – May 25th, 2001

R3-011659

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **426** ⌘ rev **1** ⌘ Current version: **3.5.0** ⌘

*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 of the text for *ToAWE* IE
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	2001-05-10
Category:	⌘	**F**
Release:	⌘	R99

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 definition text specifies that “a frame received after ToAWS gives a Timing Adjustment Control frame”. This is inconsistent with TS 25.402: ToAWS should be replaced by ToAWE.
Summary of change:	⌘	R1: Link between CR on R99 and CR on REL-4 has been added. R0: Correct “ToAWS” in “ToAWE” in the text.
Consequences if not approved:	⌘	The specification will remain inconsistent with 25.402 which might lead to incorrect implementations. This CR is backward compatible with the intended behaviour described in TS 25.402.

Clauses affected:	⌘	9.2.1.60		
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	25.433 v4.0.0 (CR427)
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.

9.2.1.60 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 ~~TOAWS~~ TOAWE gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
ToAWE			INTEGER (0..2559)	ms.

3GPP TSG-RAN WG3 Meeting #21
Busan, Korea, May 21st – May 25th, 2001

R3-011660

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **427** ⌘ rev **1** ⌘ Current version: **4.0.0** ⌘

*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 of the text for *ToAWE* IE
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	2001-05-10
Category:	⌘	**A**
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 definition text specifies that “a frame received after ToAWS gives a Timing Adjustment Control frame”. This is inconsistent with TS 25.402: ToAWS should be replaced by ToAWE.
Summary of change:	⌘	R1: Link between CR on R99 and CR on REL-4 has been added. R0: Correct “ToAWS” in “ToAWE” in the text.
Consequences if not approved:	⌘	The specification will remain inconsistent with 25.402 which might lead to incorrect implementations. This CR is backward compatible with the intended behaviour described in TS 25.402.

Clauses affected:	⌘	9.2.1.60		
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	25.433 v3.5.0 (CR426)
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.

9.2.1.60 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 ~~TOAWS~~ TOAWE gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
ToAWE			INTEGER (0..2559)	ms.

3GPP TSG-RAN WG3 Meeting #21
Busan, Korea, 21st – 25th May, 2001

Tdoc R3-011459

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **430** ⌘ rev **-** ⌘ Current version: **3.5.0** ⌘

*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:	⌘	Corrections on Dedicated Measurement Initiation Request message
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May 2001
Category:	⌘	**F**
Release:	⌘	R99

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:	⌘	This CR corrects the tabular format of the DEDICATED MEASUREMENT INITIATION REQUEST message according to ASN.1 of the Dedicated Measurement Initiation procedure
Summary of change:	⌘	In the tabular format of the Dedicated Measurement Initiation Request message the choice for selecting the target of the measurement (RL, RLS; allRL, allRLS) is in wrong order compared to the ASN.1 code of the message. To align the tabular format and the ASN.1, the order of the choices is corrected in the tabular format.
Consequences if not approved:	⌘	If this CR is not approved, there will remain inconsistencies between the ASN.1 and the tabular format of the DEDICATED MEASUREMENT INITIATION REQUEST message. Backward compatibility: This CR is backward compatible with the description text and with the implementation of the message according to the ASN.1 provided.

Clauses affected:	⌘	9.1.52		
Other specs Affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	CR 361 to TS 25.423 V4.0.0 ; CR 360 to TS 25.423 V3.5.0, CR 431 to TS 25.433 V4.0.0
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:

Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

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.

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.

9.1.52 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
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 *Dedicated Measurement Object Type*	M				YES	reject
>RL					–	
>>RL Information		1..<maxnoofRLs>			EACH	reject
>>>RL ID	M		9.2.1.53		–	
>>>DPCH ID	O		9.2.3.5	TDD only	–	
~~*>ALL RL*~~			~~NULL~~		~~–~~	
>RLS				FDD only	–	
>>RL Set Information		1..<maxnoofRLSets>			–	
>>>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 reporting indicator	M		FN reporting indicator 9.2.1.29B		YES	reject
CFN	O		9.2.1.7		YES	reject

Range	Explanation
MaxnoofRLs	Maximum number of individual RLs a measurement can be started on.
MaxnoofRLSets	Maximum number of individual RL Sets a measurement can be started on.

3GPP TSG-RAN WG3 Meeting #21
Busan, Korea, 21st – 25th May, 2001

Tdoc R3-011460

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **431** ⌘ rev **-** ⌘ Current version: **4.0.0** ⌘

*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:	⌘	Corrections on Dedicated Measurement Initiation Request message
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May 2001
Category:	⌘	**A**
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:	⌘	This CR corrects the tabular format of the DEDICATED MEASUREMENT INITIATION REQUEST message according to ASN.1 of the Dedicated Measurement Initiation procedure
Summary of change:	⌘	In the tabular format of the Dedicated Measurement Initiation Request message the choice for selecting the target of the measurement (RL, RLS; allRL, allRLS) is in wrong order compared to the ASN.1 code of the message. To align the tabular format and the ASN.1, the order of the choices is corrected in the tabular format.
Consequences if not approved:	⌘	If this CR is not approved, there will remain inconsistencies between the ASN.1 and the tabular format of the DEDICATED MEASUREMENT INITIATION REQUEST message. Backward compatibility: This CR is backward compatible with the description text and with the implementation of the message according to the ASN.1 provided.

Clauses affected:	⌘	9.1.52		
Other specs Affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	CR 361 to TS 25.423 V4.0.0 ; CR 360 to TS 25.423 V3.5.0, CR 430 to TS 25.433 V3.5.0
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:

Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

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.

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.

9.1.52 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
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 *Dedicated Measurement Object Type*	M				YES	reject
>RL					–	
>>RL Information		1..<maxnoofRLs>			EACH	reject
>>>RL ID	M		9.2.1.53		–	
>>>DPCH ID	O		9.2.3.5	TDD only	–	
~~*>ALL RL*~~			~~NULL~~		~~–~~	
>RLS				FDD only	–	
>>RL Set Information		1..<maxnoofRLSets>			–	
>>>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 reporting indicator	M		FN reporting indicator 9.2.1.29B		YES	reject
CFN	O		9.2.1.7		YES	reject

Range	Explanation
MaxnoofRLs	Maximum number of individual RLs a measurement can be started on.
MaxnoofRLSets	Maximum number of individual RL Sets a measurement can be started on.

3GPP TSG-RAN WG3 Meeting #21
Busan, Korea, 21st-25th May 2001

R3-011461

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **432** ⌘ rev **-** ⌘ Current version: **3.5.0** ⌘

*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 **X** Core Network ☐

Title:	⌘	Clarification to the Common Transport Channel Setup procedure
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	9 May 2001
Category:	⌘	**F**
Release:	⌘	R99

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 wording of the requirement in the specification implies that the common transport channel is Enabled and existing on the Uu interface before sending the COMMON TRANSPORT CHANNEL SETUP RESPONSE message. But in fact, the common transport channel cannot adopt the state Enabled (i.e. usable by the CRNC) and the common physical channel cannot exist on the Uu interface until the transport bearer is established, and this establishment happens only after the RNC receives the response message.
Summary of change:	⌘	The text should be rearranged to show the correct sequence of events at the Node B. The sentence "The defined common transport channels… shall adopt the state Enabled in Node B and … exist on the Uu interface" should be moved at the end of the clause. Also, "once the transport bearer(s) are established" should be added to avoid misinterpretations.
Consequences if not approved:	⌘	The current text leads to misinterpretations. If this CR is not approved, it would lead to unnecessary confusion and inconsistencies. Backward compatibility: The CR is backward compatible with the intended behaviour of the nodes.

Clauses affected:	⌘	8.2.1.2		
Other specs affected:	⌘	**X** Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	TS 25.433 V4.0.0, CR433 REL-4
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.

8.2.1.2 Successful Operation

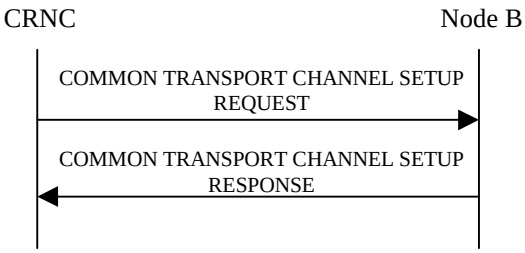

Figure 1: Common Transport Channel Setup procedure, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL SETUP REQUEST message sent from the CRNC to the Node B.

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 - 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 a Secondary CCPCH, the Node B shall configure and activate it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.]

[TDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains one or more Secondary CCPCHs, the Node B shall configure and activate 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 one or several FACHs, the Node B shall configure and activate them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains a PCH and a PICH, the Node B shall configure and activate them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

PRACH: When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains a PRACH, the Node B shall configure and activate it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[FDD-PCPCHs]: When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains PCPCHs, the Node B shall configure and activate 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.

After ~~a~~ successfully configuring ~~procedure,~~ the ~~defined~~ requested common transport channels and the common physical channels ~~shall adopt the state Enabled [6] in Node B and the common transport channels exist on the Uu interface. T~~, 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 Node B and the common physical channels exist on the Uu interface.

3GPP TSG-RAN WG3 Meeting #21
Busan, Korea, 21st-25th May 2001

R3-011462

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **433** ⌘ rev **-** ⌘ Current version: **4.0.0** ⌘

*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 to the Common Transport Channel Setup procedure
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	9 May 2001
Category:	⌘	**A**
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 wording of the requirement in the specification implies that the common transport channel is Enabled and existing on the Uu interface before sending the COMMON TRANSPORT CHANNEL SETUP RESPONSE message. But in fact, the common transport channel cannot adopt the state Enabled (i.e. usable by the CRNC) and the common physical channel cannot exist on the Uu interface until the transport bearer is established, and this establishment happens only after the RNC receives the response message.
Summary of change:	⌘	The text should be rearranged to show the correct sequence of events at the Node B. The sentence "The defined common transport channels… shall adopt the state Enabled in Node B and … exist on the Uu interface" should be moved at the end of the clause. Also, "once the transport bearer(s) are established" should be added to avoid misinterpretations.
Consequences if not approved:	⌘	The current text leads to misinterpretations. If this CR is not approved, it would lead to unnecessary confusion and inconsistencies. Backward compatibility: The CR is backward compatible with the intended behaviour of the nodes.

Clauses affected:	⌘	8.2.1.2		
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	TS 25.433 V3.5.0, CR432 R99
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.

8.2.1.2 Successful Operation

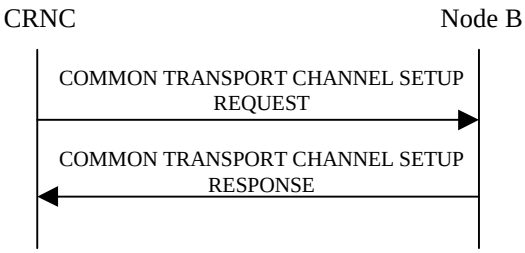

Figure 1: Common Transport Channel Setup procedure, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL SETUP REQUEST message sent from the CRNC to the Node B.

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 - 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 a Secondary CCPCH, the Node B shall configure and activate it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.]

[TDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains one or more Secondary CCPCHs, the Node B shall configure and activate 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 one or several FACHs, the Node B shall configure and activate them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains a PCH and a PICH, the Node B shall configure and activate them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

PRACH: When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains a PRACH, the Node B shall configure and activate it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[1.28Mcps TDD – FPACH]: If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains a FPACH, the Node B shall configure and activate it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[FDD-PCPCHs]:

When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains PCPCHs, the Node B shall configure and activate 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.

After ~~a~~ successfully configuring ~~procedure,~~ the ~~defined~~ requested common transport channels and the common physical channels ~~shall adopt the state Enabled [6] in Node B and the common transport channels exist on the Uu interface. T~~, 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 Node B and the common physical channels exist on the Uu interface.

3GPP TSG-RAN WG3 Meeting #21
Busan, Korea, May 21th – 25th, 2001

R3-011487

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **436** ⌘ rev **-** ⌘ Current version: **3.5.0** ⌘

*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:	⌘	Misalignment between tabular Format and ASN.1 in NBAP
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May 2001
Category:	⌘	**F**
Release:	⌘	R99

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 and ASN.1 in NBAP are misaligned. Measurement Filter Coefficient is not extensible in tabular format while is extensible in ASN.1. It can be assumed as an error since the ones in RNSAP are aligned.
Summary of change:	⌘	Measurement Filter Coefficient is changed to be extensible in Tabular format.
Consequences if not approved:	⌘	The misalignment remains between Tabular format and ASN.1, also between NBAP and RNSAP messages.

Clauses affected:	⌘	9.2.1.41		
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	25.433 CR437
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.

9.2.1.41 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, …)	

3GPP TSG-RAN WG3 Meeting #21
Busan, Korea, May 21th – 25th, 2001

R3-011488

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **437** ⌘ rev **-** ⌘ Current version: **4.0.0** ⌘

*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:	⌘	Misalignment between tabular Format and ASN.1 in NBAP
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May 2001
Category:	⌘	**A**
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 and ASN.1 in NBAP are misaligned. Measurement Filter Coefficient is not extensible in tabular format while is extensible in ASN.1. It can be assumed as an error since the ones in RNSAP are aligned.
Summary of change:	⌘	Measurement Filter Coefficient is changed to be extensible in Tabular format.
Consequences if not approved:	⌘	The misalignment remains between Tabular format and ASN.1, also between NBAP and RNSAP messages.

Clauses affected:	⌘	9.2.1.41		
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	25.433 CR436
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.

9.2.1.41 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, …)	

3GPP TSG-RAN WG3 Meeting #20
Busan, South Korea, May 21 – 25, 2001

Tdoc R3-011710

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **438** ⌘ rev **1** ⌘ Current version: **3.5.0** ⌘

*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:	⌘	Initial DL Power After addition of CCTrCH in Synchronized Reconfiguration
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May 2001
Category:	⌘	**F**
Release:	⌘	R99

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: ⌘ There is no description of handling of transmit power when adding CCTrCH's in a synchronized reconfiguration. In this case the added CCTrCH should be treated in a similar manner as occurs during a RL Addition.

Summary of change: ⌘ The initial DL power IE is added as an optional parameter within a Reconfiguration If the IE is included the Node B should use it for the initial power of the new CCTrCH otherwise it should assume the current power of other already existing CCTrCH's

Revision 1

Clarify that the Initial power concerns the DPCH only

Change references from RL to CCTrCH

Add ID number from Rapporteur

Consequences if not approved: ⌘ If this CR is not approved there will be confusion on the handling of initial power when a new CCTrCH is created.

Backward Compatibility

This CR is backward compatible.

Clauses affected: ⌘ 8.3.2, 9.1.42, 9.3.3, 9.3.6

Other specs affected: ⌘ ☒ Other core specifications ⌘ 25.433 v4.0.0 CR439
☐ Test specifications

	☐ 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.

8.3.2 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 all Radio Links 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

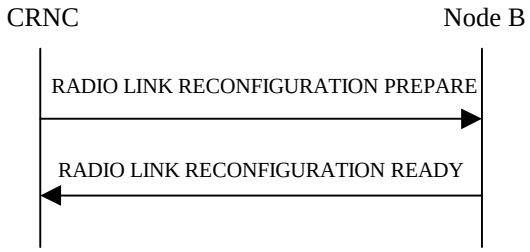

Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

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 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 – 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 scrambling code in the new configuration.]

- [FDD – If the *RL Information* IE includes the *DL Code Information* IE containing a *DL Channelisation Code Number* IE, the Node B shall apply the channelisation code in the new configuration.]

- [FDD – If the *RL Information* IE 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 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.

- [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 Iur, 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.

9.1.42 RADIO LINK RECONFIGURATION PREPARE

9.1.42.1 FDD Message

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 CCTrCH to Add		*0.. <maxno of 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		–	
>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 CCTrCH to Modify		*0.. <maxno of 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		–	
>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 <maxnoofULts>			–	
>>>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 <maxnoOfDPCH>			–	

>>>>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 CCTrCH to Delete		*0..* <maxno of CCTrCHs>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
DL CCTrCH to Add		*0..* <maxno of CCTrCHs>			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 CCTrCHs>		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 of CCTrCHs>			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 CCTrCHs>		List of uplink CCTrCH which provide TPC	–	
>>TPC CCTrCH ID	M		CCTrCH 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 ..			–	

		<maxnoofDLts>				
>>>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 .. <maxnoOfDPCH>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code	O		9.2.3.19		–	
>DL DPCH to delete		*0..* <maxnoof DPCHs>			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		–	
DL CCTrCH to Delete		*0..* <maxnoof CCTrCHs>			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..<maxnoofDCHs>*			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
DSCH Information to modify		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 to add	O		DSCH TDD Information 9.2.3.5A		YES	reject
DSCH Information to delete		0 .. <Maxnoof DSCHs>			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
USCH Information to modify		0 ..			GLOBAL	reject

		<Maxno of USCHs >				
>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

Condition	Explanation
CoorDCH	This IE is present only this DCH is part of a set of coordinated DCHs (number of instances of DCH Specific Info is greater than 1)

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

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,
    BlockSTTD-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,
```

```
-- **************************************************************
--
-- 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 ::= {
    ...
}

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 {
    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 ::= {
    ...
}

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

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-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 ::= {
    ...
}

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..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-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 },
    ...
}
```

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
maxNrOfDLCodes              INTEGER ::= 8
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 ::= 4
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
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

-- **************************************************************
--
-- 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-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
```

3GPP TSG-RAN WG3 Meeting #20
Busan, South Korea, May 21 – 25, 2001

Tdoc R3-011711

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **439** ⌘ rev **1** ⌘ Current version: **4.0.0** ⌘

*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:	⌘	Initial DL Power After addition of CCTrCH in Synchronized Reconfiguration
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May 2001
Category:	⌘	**A**
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: ⌘ There is no description of handling of transmit power when adding CCTrCH's in a synchronized reconfiguration. In this case the added CCTrCH should be treated in a similar manner as occurs during a RL Addition.

Summary of change: ⌘ The initial DL power IE is added as an optional parameter within a Reconfiguration If the IE is included the Node B should use it for the initial power of the new CCTrCH otherwise it should assume the current power of other already existing CCTrCH's.

Revision 1

Clarify that the Initial power concerns the DPCH only

Change references from RL to CCTrCH

Add ID number from Rapporteur

Consequences if not approved: ⌘ If this CR is not approved there will be confusion on the handling of initial power when a new CCTrCH is created.

Backward Compatibility

This CR is backward compatible.

Clauses affected: ⌘ 8.3.2, 9.1.42, 9.3.3, 9.3.6

Other specs affected: ⌘

☒	Other core specifications	⌘ 25.433 v3.5.0 CR438
☐	Test specifications	
☐	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.

8.3.2 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 all Radio Links 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

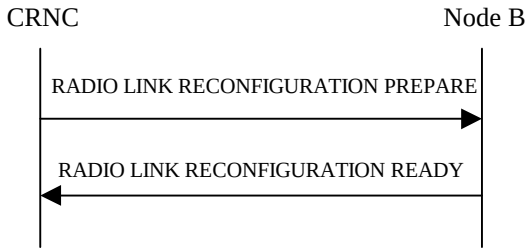

Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

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 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.]

[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 – 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]).]

[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, 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 both *SSDT Cell Identity* IE and *SSDT Cell Identity for EDSCHPC* IE, then Node B shall ignore the *SSDT Cell Identity for EDSCHPC* IE.]

- [FDD – If the *RL Information* IE includes a *DL Code Information* IE containing a *DL Scrambling Code* IE, the Node B shall apply the scrambling code in the new configuration.]

- [FDD – If the *RL Information* IE includes the *DL Code Information* IE containing a *DL Channelisation Code Number* IE, the Node B shall apply the channelisation code in the new configuration.]

- [FDD – If the *RL Information* IE 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 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.

- [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 Iur, 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.

9.1.42 RADIO LINK RECONFIGURATION PREPARE

9.1.42.1 FDD Message

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 CCTrCH to Add		*0.. <maxno of 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		–	
>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 CCTrCH to Modify		*0.. <maxno of 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		–	
>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 <maxnoofULts>		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 <maxnoOfDPCH>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code	O		9.2.3.19		–	
>>UL Timeslot Information LCR		0 to <MaxnoofULtsLCR>		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 <maxnoOfDPCHLCR>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code LCR	O		9.2.3.19a		–	
>UL DPCH to delete		*0..* <maxnoof 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..* <maxnoof CCTrCHs>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
DL CCTrCH to Add		*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		–	
>PunctureLimit	M		9.2.1.50		–	
>TPC CCTrCH List		0 to <maxnoCCTrCHs>		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		–	
DL CCTrCH to Modify		*0..* <maxno of CCTrCHs>			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 CCTrCHs>		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 OfDPCH>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code	O		9.2.3.19		–	
>>DL Timeslot Information LCR		0 .. <Maxno ofDLtsL		For 1.28Mcps TDD only	GLOBAL	reject

		CR>				
>>>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 .. <maxnoOfDPCHLCRs>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code LCR	O		9.2.3.19a		–	
>DL DPCH to delete		*0..* <maxnoof 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		9.2.3.4O		–	
DL CCTrCH to Delete		*0..* <maxnoof CCTrCHs>			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..<maxnoofDCHs>*			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
DSCH Information to modify		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 to add	O		DSCH TDD Information		YES	reject

			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

Condition	Explanation
CoorDCH	This IE is present only this DCH is part of a set of coordinated DCHs (number of instances of DCH Specific Info is greater than 1)

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

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,
    BlockSTTD-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,
    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-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,
    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,
    MaxFPACH-Power,
    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,
    SFNSFN,
    SFNSFNChangeLimit,
    SFNSFNDriftRate,
    SFNSFNDriftRateQuality,
    SFNSFNQuality,
    SFNSFNTimeStamp
```

```
    ShutdownTimer,
    SIB-Originator,
    SpecialBurstScheduling,
    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,
    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,
    UARFCN,
    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-Cell-InformationItem-AuditRsp,
```

```
    id-Cell-InformationItem-ResourceStatusInd,
    id-Cell-InformationList-AuditRsp,
    id-CellParameterID,
    id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD,
    id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD,
    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-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-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-InformationList-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-ParameterList-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-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-InformationAddListIE-RL-ReconfPrepTDD,
    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-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,
```

```
-- **************************************************************
--
-- 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-InformationAddItem-RL-ReconfPrepTDD
    PRESENCE OPTIONAL }
}

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 }
}

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

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 ::= {
    ...,
    { ID id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD     CRITICALITY reject      EXTENSION   UL-Timeslot-InformationModify-ModifyList-RL-
ReconfPrepTDD       PRESENCE optional }
}

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-Timeslot-InformationLCR,
    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 ::= {
    ...
}

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

UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR                         TimeSlotLCR,
    midambleShiftAndBurstTypeLCR        MidambleShiftAndBurstTypeLCR        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 }
}

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

```
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 }
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod                    RepetitionPeriod,
    repetitionLength                    RepetitionLength,
    tdd-DPCHOffset                      TDD-DPCHOffset,
    dL-Timeslot-InformationLCR          DL-Timeslot-InformationLCR,
    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-InformationAddItem-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 }}

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-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-Timeslot-InformationLCR,
    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,
    midambleShiftAndBurstTypeLCR        MidambleShiftAndBurstTypeLCR            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-LCR-Timeslot-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 },
    ...
}
```

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 ::= 39
id-cellSynchronisationReconfiguration           ProcedureCode ::= 40
id-cellSynchronisationReporting                 ProcedureCode ::= 41
id-cellSynchronisationTermination               ProcedureCode ::= 42
id-cellSynchronisationFailure                   ProcedureCode ::= 43
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
maxNrOfDLTSsLCR             INTEGER ::= 6
maxNrOfDLCodes              INTEGER ::= 8
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 ::= 4
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
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-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-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-InformationList-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 ::= 310
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-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-InformationAddListIE-RL-ReconfPrepTDD                   ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD               ProtocolIE-ID ::= 482
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-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-InitDL-Power                                                ProtocolIE-ID ::= 509
END
```

3GPP TSG-RAN WG3 Meeting #20
Busan, South Korea, May 21 – 25, 2001

Tdoc R3-011681

CR-Form-v3

CHANGE REQUEST

⌘ **25.433 CR 440** ⌘ rev **1** ⌘ Current version: **3.5.0** ⌘

*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 **X** Core Network ☐

Title:	⌘	Correction of TDD DL TPC Step Size After addition of CCTrCH in Synchronised Reconfiguration
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May 2001
Category:	⌘	**F**
Release:	⌘	R99

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:	⌘	It is not currently possible to specify the Downlink TPC step size when adding a new DL CCTrCH using the synchronised reconfiguration when another CCTrCH already exists. Therefore there is no way to determine a value for TPC step size when adding a new CCTrCH to an already existing CCTrCH.
Summary of change:	⌘	Within the description text when adding a DL CCTrCH the DL TPC step size for the new CCTrCH shall be set to the same value of the lowest numbered CCTrCH already existing in the current configuration.
Consequences if not approved:	⌘	If this CR is not approved the TPC step size for a new downlink CCTrCH can not be determined for a new CCTrCH Backward Compatibility This CR is not backward compatible because it fixes an error which can not be repaired without specifying new behavour.

Clauses affected:	⌘	8.3.2		
Other specs affected:	⌘	**X** Other core specifications	⌘	25.433 v4.0.0 CR441 25.423 v3.5.0 CR381 25.423 v4.0.0 CR382
		☐ Test specifications		
		☐ 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.

8.3.2 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 all Radio Links 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

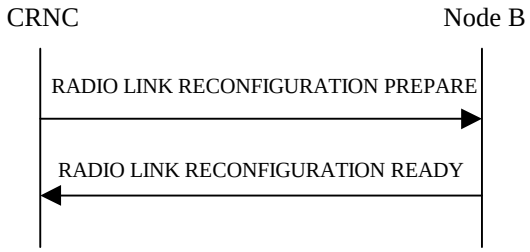

Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

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 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 scrambling code in the new configuration.]

- [FDD – If the *RL Information* IE includes the *DL Code Information* IE containing a *DL Channelisation Code Number* IE, the Node B shall apply the channelisation code in the new configuration.]

- [FDD – If the *RL Information* IE 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 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.

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 Iur, 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.

3GPP TSG-RAN WG3 Meeting #20
Busan, South Korea, May 21 – 25, 2001

Tdoc R3-011498

CR-Form-v3

CHANGE REQUEST

⌘ **25.433 CR 441** ⌘ rev ⌘ Current version: **4.0.0** ⌘

*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 [X] Core Network ☐

Title:	⌘	Correction of TDD DL TPC Step Size After addition of CCTrCH in Synchronised Reconfiguration
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May 2001
Category:	⌘	**A**
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:	⌘	It is not currently possible to specify the Downlink TPC step size when adding a new DL CCTrCH using the synchronised reconfiguration when another CCTrCH already exists. Therefore there is no way to determine a value for TPC step size when adding a new CCTrCH to an already existing CCTrCH.
Summary of change:	⌘	Within the description text when adding a DL CCTrCH the DL TPC step size for the new CCTrCH shall be set to the same value of the lowest numbered CCTrCH already existing in the current configuration.
Consequences if not approved:	⌘	If this CR is not approved the TPC step size for a new downlink CCTrCH can not be determined for a new CCTrCH Backward Compatibility This CR is not backward compatible because it fixes an error which can not be repaired without specifying new behavour.

Clauses affected:	⌘	8.3.2		
Other specs affected:	⌘	[X] Other core specifications	⌘	25.433 v3.5.0 CR440 25.423 v3.5.0 CR381 25.423 v4.0.0 CR382
		☐ Test specifications		
		☐ 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.

8.3.2 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 all Radio Links 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

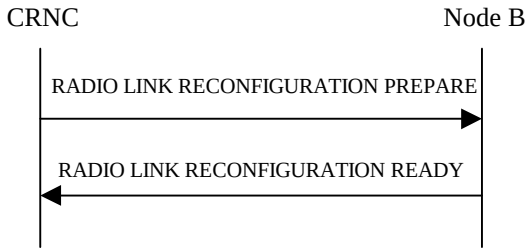

Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

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 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.]

[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]).]

[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, 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 both *SSDT Cell Identity* IE and *SSDT Cell Identity for EDSCHPC* IE, then Node B shall ignore the *SSDT Cell Identity for EDSCHPC* IE.]

- [FDD – If the *RL Information* IE includes a *DL Code Information* IE containing a *DL Scrambling Code* IE, the Node B shall apply the scrambling code in the new configuration.]

- [FDD – If the *RL Information* IE includes the *DL Code Information* IE containing a *DL Channelisation Code Number* IE, the Node B shall apply the channelisation code in the new configuration.]

- [FDD – If the *RL Information* IE 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 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.

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 Iur, 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.

3GPP TSG-RAN3 Meeting #21
Busan, South Korea, 21st –25th May, 2001

R3-011503

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **442** ⌘ rev **-** ⌘ Current version: **3.5.0** ⌘

*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:	⌘	Order of elements in bit strings
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May 2001
Category:	⌘	**F**
Release:	⌘	R99

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:	⌘	Some information elements are specified in NBAP as bitstrings, but they are non transparent. In some of these cases each bit has a separate meaning and this is explained by values of the total bit string. However, the order of the bits is not explicitly defined in these explanations.
Summary of change:	⌘	The ASN.1 was modified regarding the relevant bitstrings using named bits, which prevents misunderstanding the meaning of each bit. A reference to the ASN.1 was added in the tabular format where necessary together with some clarification.
Consequences if not approved:	⌘	High risk of interoperability problems in case of different interpretations of the order of elements. Backward compatibility: this CR is backward compatible with the assumed interpretation of the previous version of the specification (i.e. subchannels or signatures number 0 correspond to the LSB). However, as it handles unspecified parts, some implementations may not be compatible with this modification.

Clauses affected:	⌘	9.2.2.1C, 9.2.2.31, 9.2.2.38, 9.3.4.		
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	CR 443 NBAP R4
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.

9.2.2.1C CD Sub Channel Numbers

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
CD Sub Channel Numbers			BIT STRING (12)	~~Bit 0=Sub Channel Number 0~~ ~~Bit 1=Sub Channel Number 1~~ ~~...~~ ~~Bit 11=Sub Channel Number 11~~ ~~[10]~~ 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].

9.2.2.31 Preamble Signature

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Preamble Signatures			BIT STRING (16)	~~Bit 0=P0~~ ~~Bit 1=P1~~ ~~..~~ ~~Bit 15=P15~~ ~~[9]~~ 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].

9.2.2.38 RACH sub Channel numbers

IE/Group Name	Presence	Range	IE type and reference	Semantics description
RACH Sub Channel Numbers			BIT STRING (12)	~~Bit 0=Sub Channel Number 0~~ ~~Bit 1=Sub Channel Number 1~~ ~~...~~ ~~Bit 11=Sub Channel Number 11~~ 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.

9.3.4 Information Elements Definitions

****UNCHANGED TEXT WAS REMOVED****

```
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))
```

****UNCHANGED TEXT WAS REMOVED****

```
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))
-- Bit 0=P0, Bit 1=P1, .. ,Bit 15=P15 [9] --
```

****UNCHANGED TEXT WAS REMOVED****

```
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))
-- Bit 0=Sub Channel Number 0, Bit 1=Sub Channel Number 1, .., Bit 11=Sub Channel Number 11
```

3GPP TSG-RAN3 Meeting #21
Busan, South Korea, 21st –25th May, 2001

R3-011504

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **443** ⌘ rev **-** ⌘ Current version: **4.0.0** ⌘

*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:	⌘	Order of elements in bit strings
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	May 2001
Category:	⌘	**A**
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:	⌘	Some information elements are specified in NBAP as bitstrings, but they are non transparent. In some of these cases each bit has a separate meaning and this is explained by values of the total bit string. However, the order of the bits is not explicitly defined in these explanations.
Summary of change:	⌘	The ASN.1 was modified regarding the relevant bitstrings using named bits, which prevents misunderstanding the meaning of each bit. A reference to the ASN.1 was added in the tabular format where necessary, and some clarification was added.
Consequences if not approved:	⌘	High risk of interoperability problems in case of different interpretations of the order of elements. Backward compatibility: this CR is backward compatible with the assumed interpretation of the previous version of the specification (i.e. subchannels or signatures number 0 correspond to the LSB). However, as it handles unspecified parts, some implementations may not be compatible with this modification.

Clauses affected:	⌘	9.2.2.1C, 9.2.2.31, 9.2.2.38, 9.3.4.		
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	CR 442on NBAP R99
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.

9.2.2.1C CD Sub Channel Numbers

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
CD Sub Channel Numbers			BIT STRING (12)	~~Bit 0=Sub Channel Number 0~~ ~~Bit 1=Sub Channel Number 1~~ ~~...~~ ~~Bit 11=Sub Channel Number 11~~ ~~[10]~~ 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].

9.2.2.31 Preamble Signature

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Preamble Signatures			BIT STRING (16)	~~Bit 0=P0~~ ~~Bit 1=P1~~ ~~..~~ ~~Bit 15=P15~~ ~~[9]~~ 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].

9.2.2.38 RACH sub Channel numbers

IE/Group Name	Presence	Range	IE type and reference	Semantics description
RACH Sub Channel Numbers			BIT STRING (12)	~~Bit 0=Sub Channel Number 0~~ ~~Bit 1=Sub Channel Number 1~~ ~~...~~ ~~Bit 11=Sub Channel Number 11~~ 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.

9.3.4 Information Elements Definitions

****UNCHANGED TEXT WAS REMOVED****

```
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))
```

****UNCHANGED TEXT WAS REMOVED****

```
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))
-- Bit 0=P0, Bit 1=P1, .. ,Bit 15=P15 [9] --
```

****UNCHANGED TEXT WAS REMOVED****

```
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))
-- Bit 0=Sub Channel Number 0, Bit 1=Sub Channel Number 1, .., Bit 11=Sub Channel Number 11
```